OVERVIEW

For All Educational Executives January 1961

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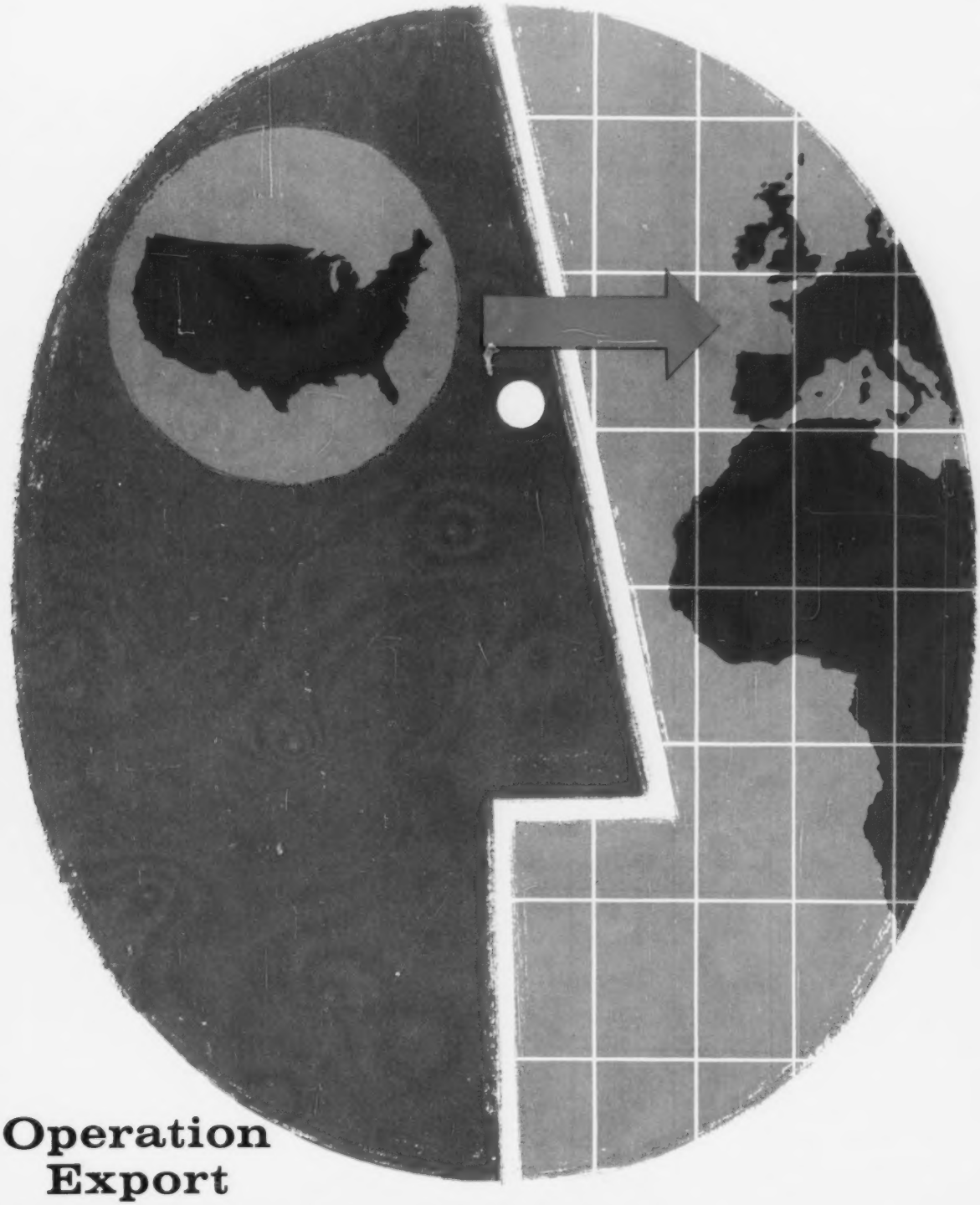

Operation Export

American education goes overseas

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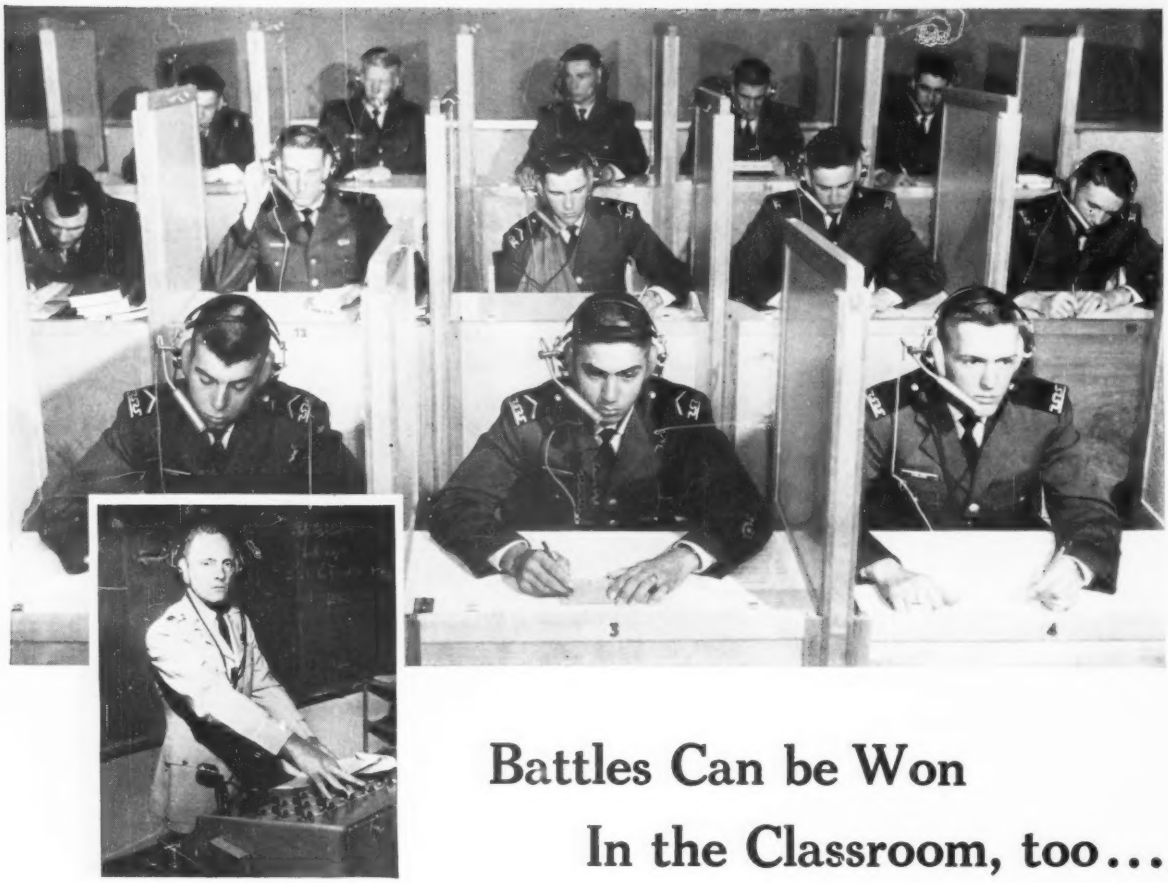

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Captain Robert F. C. Winger
Asst. Professor of Spanish
United States Air Force Academy

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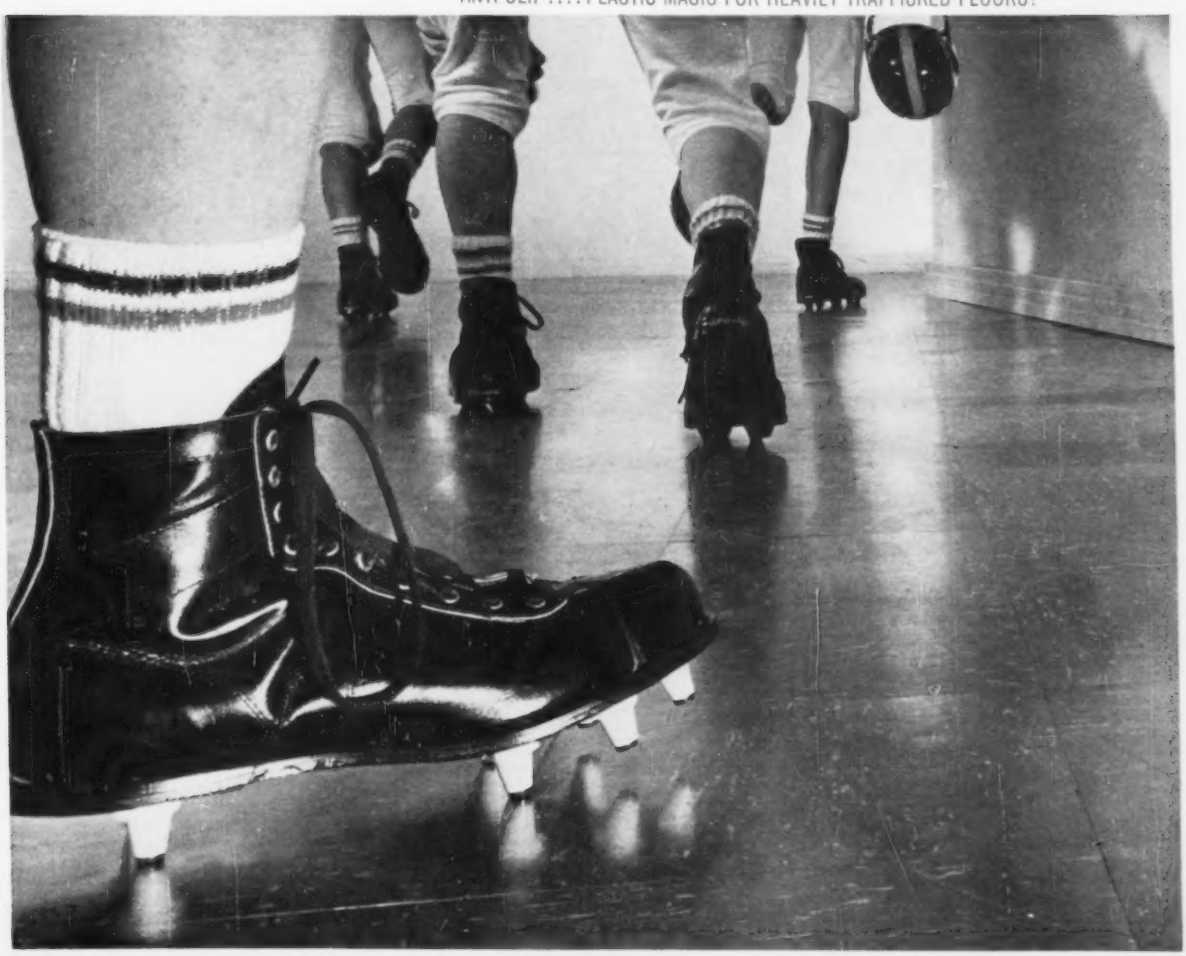

OVERVIEW

For All Educational Executives

A Buttenheim Publication

Our Second Year . . .

. . . of publishing a magazine designed to be as broad in coverage and editorial concern as the total educational enterprise is ushered in with this issue of OVERVIEW.

Never has the need for this type of magazine seemed more apparent to me than when I read in proof form articles for this issue which contain challenges like these:

"Many states now have less than half of their youth completing four years of high school and less than 20 percent entering college. Within the next decade, at least two-thirds of the youth in every state should complete twelve years of schooling and at least one-third enter college." Page 70.

"The roll call to education is being heard around the world and the list of absentees grows steadily shorter. Credit America's export of educational expertise to the world's developing nations in Asia, Africa, and South America." Page 40.

"A profound and silent educational force is at work in our society, growing out of the new climate of American industry. It is a known fact that 85 percent of the 350 largest American corporations are carrying on some kind of educational activity requiring regular attendance of their employees." Page 44.

It will take an army of dedicated educational administrators to meet these challenges of the 1960's. There will also be a growing need each year for better communication between the many and diverse areas of education. Our goal for OVERVIEW, as the very name implies, is to supply that broad perspective.

Donald V. Buttenheim
Publisher

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OVERVIEW

For All Educational Executives

January 1961

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A staff of 200 serves an enrollment of 7,500 in one of the country's most unusual systems: St. Louis (Mo.) County's Special School District for Education and Training of Handicapped Children.

38 **Contracting for New Buildings**

Multiple contracts, competitive bidding, contract forms, performance guarantees, and other important aspects of working with a builder are surveyed in this special nationwide OVERVIEW report.

40 **Operation Export**

New nations of Africa, Asia, and South America are getting vital assistance from the United States for setting up democratic school systems serving people just entering the Twentieth Century. Edward Warner Brice of the U. S. Office, describes our herculean effort to help forty-three countries around the world.

42 **"Education Now," Says Young Africa**

Just back from a personal tour of the question-mark continent, Giles T. Brown tells how Africans feel toward the education job ahead.

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Humming within the complex structures of great corporations are complete "school systems" with top-level executive talent, Newton Wilson reports.

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50 Modular Furniture for Model Schools

Exclusively prepared for OVERVIEW by the design consultants for U. S. Steel, these "sketches of tomorrow" may mean better furniture at less cost.

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Don't let your kitchens and dining rooms be carriers of winter ills. Here is a program of maintenance for health as well as economy.

57 Thingsmanship: The Art of Marshalling Your Resources

George Gibson defines a new administrative position for large schools and colleges: coordinator of instructional materials.

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Report of the President's Commission on National Goals pins its hopes on America's educational system.

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Cover by Jack Brown

LETTERS

Future Voters

I have just seen the November issue of OVERVIEW Magazine, and I couldn't help but wonder how the writer of the *Forum* ["No Time For Election Discussion"] considered himself qualified to make such a general statement as, "The 1960 presidential campaign is passing unmentioned in many classrooms throughout the United States."

Many schools in our area placed great emphasis upon the 1960 elections. Actually, some high school students knew more about the election than their parents. Some schools held mock campaigns and elections and permitted every child to vote on the candidates and the issues.

I feel that American public schools are still putting first things first, and I am sure very few schools sacrifice instruction in social studies to boost the science program. All students will become voting citizens, but not all students can be expected to become scientists.

FRANKLIN B. WALTER, Superintendent, Johnsville-New Lebanon (Ohio) Local School District

Staff "Utilization"

. . . I have read [November OVERVIEW] very carefully and with much interest. It seems to me your editorial "Is the Staff to Be Utilized?" is both thoughtful and timely. Apparently we agree that except for the children, the most precious factor in any school is the teacher. . . .

RACHEL ROYSTON KNUTSON, Vice Principal, Sharples Junior High School, Seattle, Wash.

Defense Education

. . . We are just in the process of installing an elaborate thirty-place language laboratory. I have some doubts about the thing, myself, but hope it will be worth what it is costing.

This business of NDEA being slanted to such a narrow part of the curriculum is gradually coming to

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Letters (continued)

the public attention. The "D" in NDEA seems to have got things out of proportion. . . .

G. ALVIN WILSON, President, Association of School Business Officials of the United States and Canada

We read the lead article on language laboratories in November OVERVIEW with a great deal of interest here in Oregon.

Generally, in this state, we have tended to take somewhat the same point of view as expressed in the article and have translated many of the suggestions for planning given in this article into action, as requests for this equipment reached us from the field under Title III of the National Defense Education Act.

It seems to me that your points concerning the National Defense Education Act merely emphasize once again something which most educators recognized from the first, and that is the limitation imposed on overall educational planning by confinement of the benefits of the Act to these subject matter areas. Yet, speaking from experience in working through three years of applications in one state, certainly utter chaos and confusion compounded would have resulted if the Act had been broadened into all areas from its beginning. For instance, prior to NDEA, there were less than forty subject area specialists employed in all of the states. If the kind of planning which you demand in this article is to be carried out, it is inevitable that specialists at the state level and in many of the local districts are going to be required. Again, this piecemeal approach is one of the costs that we must pay for the continuing lag of education in making efficient use of the tools put at our disposal by instructional technology. . . .

REX PUTNAM, Superintendent, Public Instruction, and HENRY C. RUARK, JR., Consultant on Instructional Materials, State Of Oregon, Salem

"Substantial"

. . . OVERVIEW gives the impression of being considerably more substantial in educational content than are most journals in the field.

Incidentally the cover, "New Patterns in Educational Staffing," [November] is terrific. . . .

DONALD W. ROBINSON, San Francisco

Space for Instruction

. . . ["Designing the Non-School Classroom," December] is very interesting. I do believe that a great deal of instruction goes on in the United States with many make-shift facilities and I think a well-considered space for instruction could have been included in the original design had the building committee thought of it. The idea is good. . . .

HERBERT H. SWINBURNE, Nolen & Swinburne, Architects, Philadelphia

National System

Cheers for Walter Cocking's comments on a National System of Education [November *As I See It*].

Far too many horses are being ridden off in all directions today in the field of education.

Shades of Paul Revere! The horse riders are all carrying the same message: Education for survival of democratic ideals. But where oh where is the cohesive agency to solidify the action necessary to get the job done.

EUGENE E. DAVIS, Superintendent, Grayslake (Ill.) Community Consolidated Elementary Schools

I have just read your *As I See It*, with the subject, "A National System of Education."

I don't know when I have read any article which was quite so well presented and which really seemed so obvious. This, as you very well know, is a different approach. It is an area in which there is a great deal of disagreement and one in which educators need a lot of educating.

I am in complete agreement with you. I am not one who has ever been afraid of federal control. I do fear regimentation and nationwide mediocrity, which we have now to a very great degree. . . .

GEO. D. HANN, Superintendent, Ardmore (Oklahoma) City Schools

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Samsonite chair purchased 15 years ago

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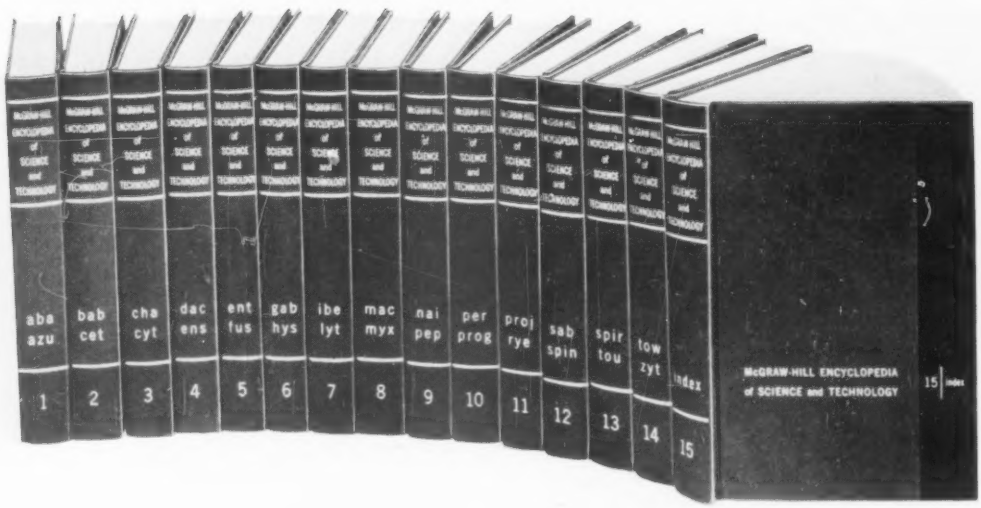

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ONE VIEW

Archibald B. Shaw

Courses, Credits and Competence

IF THERE'S ONE problem found in every educational enterprise it's in the relationship between course completion and competence. How do we mark off the steps in the acquiring of desired competence? By tests? By credit points? By hours? By certificates of completion of course? This is a hardy problem.

It haunts elementary school people, in promotion policy. In the secondary school it's the Carnegie unit, the standardized tests, and the meaning of a high school diploma. In college it's the number of courses, the balance among them, and the meaning of the baccalaureate degree. The graduate schools struggle with definitions of good programs of study for a given profession and how to tell when someone is ready ("prepared") to enter it.

Training directors find life easier in the "lower" parts of their program. But when they come to managerial training or executive development the same uncertainties creep in.

This is no field for the man with a formula, but it does call for focused wisdom. There are better answers than either the hours-in-study or the competence-in-examination tests.

It's convenient to find an example of what strikes many as a pretty poor solution outside our own profession. The recent objective-type examination required of doctors trained in foreign medical schools is just such an example. Their right to practice or to study medicine in the U.S. was to depend exclusively on their examination score. The examination was necessarily of a type unfamiliar and in a language not native to most of its takers. As a device for protecting Americans against incompetent health service the single written test leaves much to be desired, in justice or in effectiveness.

But what about college teaching? Or school administration? Is the satisfactory completion of courses alone enough to judge fitness to practice?

In our view, the distinction between readiness for punch-card operation and for the practice of a profession lies in the combinations of qualities and competences required. The problem is to devise a way of assuring that both are present in some desired minimum degree.

There are three distinct steps, none of which will ever be defined precisely in a world of human beings. The most careful analysis of the kinds and degrees of competences and qualities demanded for successful practice of a profession is one step.

Another is the devising of a program of courses, studies, and experiences which will develop the desired competences and qualities. These must of course be adaptable within the limits of resources to the uniqueness of all those admitted to the program, and should be continuously evaluated as to content, method, and duration for their effectiveness.

The third step is measurement, leading to certification or admission. Like the preparation program its effectiveness rests squarely on the degree to which the list of competences and qualities required have been soundly derived.

Our view is that no single instrument will furnish an adequate measure. Written and performance examinations have an important place. Quality (personality and value) measures will be increasingly useful. Credit for courses completed will continue as a convenient criterion, since experience does count—and our faith in education rests pretty fundamentally on the proposition that experiences indelibly affect us. Finally a history of performance, in the form of a cumulative record of evaluative comments by those who have observed the behavior of the candidate in a variety of relevant situations, can uniquely contribute.

This is where the machine breaks down. Certification, to fulfill its function of appropriate discrimination, will always require some combination of objective measures with subjective evaluation by people whose wisdom, discernment, and opportunity for intimate acquaintance give real value to their estimates.

Course and credit records, yes. Examinations, yes. But discrimination between the fit and unfit requires something more—a strong infusion of informed judgment. ●

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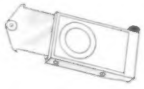

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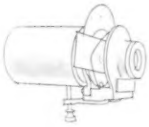

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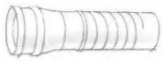

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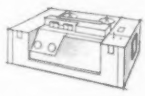

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FORUM

Christmas, a New Year, and New Orleans

Whatever our creed, however deeply we hold it, in America somehow the Christmas season brings with it a special concern for children. How cruelly ironical then is the anguish centering in New Orleans! Everybody concerned—which is to say all Americans—bears a burden of grief and guilt when little children are exposed to hate, to ugliness, even to danger.

No one would have it that way. Certainly not the school board members who undertook that office because of a deep concern for children and a high sense of civic duty. Not the administrators and teachers dedicated in their very profession to the welfare of children. Not the anguished mothers of the little colored tots. Not even the mothers seen on television spitting hate over the heads of their own babies. No one wants children hurt.

Charles Evans Hughes said that the peril of this nation is not in any foreign foe. "We, the people, are its power, its peril, and its hope." In us is the peril, for us the pain. The damage to the image of America that really counts is the damage to our own self-image, the hurt in our hearts that the American dream of worth and opportunity for every child should be so degraded. The power and hope is ours, too. The New Year brings a new chance to express our hope and harness our power to restore the American dream.

School Entering Age

When should a child enter kindergarten? Or first grade, when that is the lowest level? That question has been settled over and over again by regulation, law, court decision, and even educational consensus. But it bounces up with new vigor when the parent of a child just a day or so—or even an hour or two—past the deadline first encounters the rule.

Some school people try to meet the problem by developmental and reading readiness tests, or other "objective" data-gathering. But the problem persists for the child just below the cut-off point. And only one who has been through it can appreciate the wrath of parents whose child is deemed not quite ready! It's no wonder that we fall back on rule—even that some superintendents urge in anguish that the state pass a law.

Readiness to profit from school is not a single quality easily measured. Neither does it relate very exactly with any chronological point in development. Consider how many children seem to profit from nursery school at an age below that at which any school will admit them to kindergarten.

One hopeful solution lies in the analogy to voting age —or district citizenship. Let the school board (or the state) set an age of school entrance which is defined strictly by the calendar and never deviate from it. If it is established not as the beginning of a child's educability but as the point in his development at which the public school will take responsibility for his educational program, *and* if the schools are genuinely geared to fit and promote the maximum learning rate and development of every child, the problem of dissent diminishes. It disappears as an issue. It is understandable, uniformly applicable, and the rule of law not of men. If, on the other hand, the child's progress is in fact a lockstep, no entrance age rule will work.

History Lesson

Where can your social studies teachers get the equivalent of a college course, thirty lectures long, compressed into three days? With not one instructor but thirty-some, including the nation's top scholars? By attending the annual meetings of the American Historical Association.

Here, for three stimulating days, they can clarify their scholarly vision in the light generated when brilliant historians rub ideas together. Your teachers can explore new segments of history, hear about new research and interpretation, and listen to criticism of each scholar's ideas by eminent colleagues.

The social studies teacher must have a strong background in his subject and he must keep interpretation of historical facts up to date. The AHA sessions offer an opportunity to bridge the one- to twenty-year lag between current historical scholarship and published textbooks. The "embattled farmers" of Lexington and Concord and the "evil carpetbaggers" of post-Civil War fame (to cite two examples) have been reinterpreted in recent years, yet our texts continue to reflect an earlier image.

The greatest value for teachers, though, is the person-to-person contact with scholars in their field. The teacher is certain to find someone who can answer a question that has been nagging him about the Constitutional Convention or about the political climate in Germany in the '20s. The urbane scholarship of George Kennan, the penetrating wisdom of Allan Nevins, the wide knowledge of Arthur Schlesinger—are all there for his edification and enjoyment. Sending teachers to annual meetings of scholars like these is too good a way to improve teaching quality for administrators to ignore.—*Louis Paul, social studies teacher, Bayless H. S., St. Louis County, Mo.*

•

OVERVIEW's *Competition for Better School Design will not be held this year. The American Institute of Architects has asked that the word "competition" be restricted to contests in which architects submit competing designs for a single problem.* OVERVIEW *will continue its leadership and interest in improving the design of plant for education, and expects to make Annual Design Awards after procedures can be worked out to the satisfaction of its goals and the conditions of the* AIA. •

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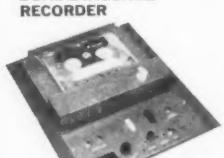

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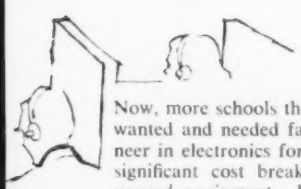

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CALENDAR

JANUARY

10–12, Assn. of American Colleges. At Denver, Colorado. Ex. dir.: Theodore A. Distler, 1818 R. Street, N.W., Washington 9, D. C.

12–15, National Audio-Visual Assn. Midwinter Conference. At Dallas, Tex. Executive Vice President, Box 337, Fairfax, Va.

FEBRUARY

9–10, Headmasters Assn. At Rye, New York. Ex. sec.: John F. Gummere, William Penn Charter School, Philadelphia 44, Pa.

11–15, National Assn. of Secondary-School Principals. At Detroit, Michigan. Ex. sec.: Ellsworth Tompkins, 1201 16th St., N.W., Washington 6, D. C.

22–25, The American Assn. of Colleges for Teacher Education. At Chicago, Illinois. Ex. sec.: Edward C. Pomeroy, 1201 16th St., N.W., Washington 6, D. C.

22–25, American Educational Research Assn. At Chicago, Illinois. Ex. sec.: Guy T. Buswell, 1201 16th St., N.W., Washington 6, D. C.

25–28, American Assn. of School Administrators. Western regional convention. At San Francisco. Ex. sec.: Finis E. Engleman, 1201 16th St., N.W., Washington 6, D. C.

28–March 3, American Assn. of Junior Colleges. At Washington, D. C. Ex. dir.: Edmund J. Gleazer, Jr., 1785 Massachusetts Ave., N.W., Washington, D. C.

MARCH

3–4, Independent Schools Education Board. At New York City. Ex. sec.: Esther Osgood, 186 Centre St., Milton 86, Mass.

5–8, Assn. for Higher Education. At Chicago, Ill. Ex. sec.: G. Kerry Smith, 1201 16th St., N.W., Washington 6, D. C.

11–14, American Assn. of School Administrators. Central regional convention. At St. Louis, Mo. Ex. sec.: Finis E. Engleman, 1201 16th St., N.W., Washington 6, D. C.

12–16, Assn. for Supervision & Curriculum Development. At Chicago, Ill. Ex. sec.: Margaret Gill, 1201 16th St., N.W., Washington 6, D. C.

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14–16, National Assn. of Collegiate Deans and Registrars. At Prairie View, Tex. Ex. sec.: Edwin M. Thorpe, Florida A & M University, Tallahassee, Fla.

17–21, American Assn. for Health, Physical Education and Recreation. National convention. At Atlantic City, N. J. Ex. sec.: Carl A. Troester, 1201 16th St., N.W., Washington 6, D. C.

18–22, Department of Elementary School Principals. At Atlantic City, N. J. Ex. sec.: Robert W. Eaves, 1201 16th St., N.W., Washington 6, D. C.

25–28, American Assn. of School Administrators. Eastern regional convention. At Philadelphia, Pa. Ex. sec.: Finis E. Engleman, 1201 16th St., N.W., Washington 6, D. C.

27–30, American Personnel & Guidance Assn. At Denver Colo. Ex. dir.: Arthur A. Hitchcock, 1605 New Hampshire Ave., N.W., Washington 9, D. C.

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LATE NEWS

For further coverage, see pages 73–78.

MAIDS OF ORLEANS: The "second battle of New Orleans" is being waged as fiercely as the first one against the British 150 years ago.

Without doubt, the city is now the focal point of opposition to integration in public schools of the South.

Four Negro girls are attending first grade classes in two previously all-white New Orleans schools. They are the only ones of 137 Negroes who applied for transfers to white schools who met all 17 criteria set down by the school board for such transfers.

Latest development in the legal struggle was the U. S. Supreme Court's refusal to delay integration in Louisiana schools. The high tribunal had been asked to stay a lower court ruling that the state's anti-integration laws were unconstitutional. Not only did the Court refuse to grant the stay, but it made it clear that a formal appeal by the state would be overruled.

Business and civic leaders express growing concern over economic side effects. Sharp declines were reported in department store, restaurant, entertainment, and transportation activity. The threat of a Negro boycott of white merchants also hangs over the business community.

A further strain on the city's economy is the prospect of payless pay days for teachers in the two troubled schools. The legislature, which presently controls the purse strings of New Orleans schools, decreed that no teacher who defies the boycott will be paid.

Meanwhile, Atlanta, Georgia, schools have been ordered to integrate for the 1961–62 school term. Current business and economic pressures indicate that Georgia may solve its school integration problem in a more peaceful way. State business leaders fear that closed schools would slow down the movement of northern industry into Georgia.

On the teacher front, Southern School News reports that public school faculties remain segregated in nine states, including five that have desegregated classes. Eight other states and the District of Columbia report some degree of desegregation among faculty, although in five of these states several teachers lost their jobs in the change to bi-racial schools.

* * *

VOICE OF THE PEOPLE: Petitions, with signatures of more than a million Maryland residents, will be presented to the state legislature on January 4 backing a $14 million program of aid to education and higher teachers salaries. The Maryland Congress of Parents and Teachers and the State Teachers Association are sponsoring the program in opposition to one endorsed by Gov. J. Millard Tawes costing only $8 million.

The parent-teacher program calls for a basic minimum salary range of $4,000–$6,000—an increase of $800 over the present minimum. The alternate proposal would raise salaries to $3,600–$5,700.

* * *

HOLDING POWER: The compulsory school attendance age should be raised from 16 to 18 years, a New York state labor official told New York City high school principals. Harold C. Hanover, president of the state AFL-CIO, asked for the move because of the increasing need for skilled workers who not only know their jobs, but who could also understand the world's political developments.

Hanover further stated that working permits should not be granted to students under sixteen. Fourteen is the present age requirement.

He warned against "quickie" vocational courses and said those who took them would find their job opportunities limited. Pointing out that future manpower requirements would be qualitative rather than quantitative, Hanover said, "The day of the unskilled and semi-skilled worker in industry . . . is almost over."

* * *

FIRST 30 DAYS: Federal aid to education will have top priority in the new 87th Congress. Proponents and foes of broader federal support of education are preparing for the legislative push.

Adam Clayton Powell, Jr. (D-NY), new chairman of the House Education and Labor Committee, is optimistic about getting through some form of education legislation. With the Kennedy administration committed to a strong federal-aid-to-education program, Powell forecasts that his committee will approve a federal aid bill acceptable to President-elect Kennedy by February.

Powell indicated he would not attempt to tack on any anti-segregation amendment, at least in committee hearings. "If the executive branch of government utilizes the existing power, no Powell amendment will be necessary," he declared. He nevertheless left the door open for bringing up such an amendment during the floor fight.

Powell is also working on a youth peace corps proposal for sending trained young Americans to help new nations.

Powell was backed by Sen. Mike Mansfield (D-Mont), new Senate majority leader, who has listed

federal support for school construction and teacher salaries as "key measures" in the Kennedy program.

Meanwhile, the U. S. Chamber of Commerce, foe of federal aid to local school districts, is citing record-high school bond approvals in the last election as evidence that federal funds are not needed. Of the 25 newly-elected Republican congressmen, the Chamber says, 13 defeated liberal Democrats—advocates of a bigger role for the federal government.

The NEA agrees that the new House is likely to be more conservative and that education legislation will encounter less support than in the 86th Congress.

Of the present House membership, 181 voted or were paired FOR last session's school aid bill; 182 voted or were paired AGAINST it. Nine did not vote. How the House votes on school legislation may be determined largely by the new members.

* * *

TIGHTER STANDARDS: In a move to raise academic standards, the University of Maryland has adopted stiffer entrance requirements beginning this fall.

Border-line high school graduates will be required to attend a special pre-college summer session. On-trial students will be admitted to the University only if they earn a "C" average in one course during the six-week summer program and pass a second course, says president Wilson H. Elkins.

The University now admits some graduates of state high schools on a trial basis. They must maintain a "C" average during their first two years. Large numbers of these students do not remain in college for even one year, according to Elkins.

He believes a state university should not be "highly selective," but that it should maintain some reasonable standards.

* * *

COLLEGE REDESIGNED: College administrators should spend more time in designing and improving space for their undergraduates. They should also consult students before erecting new buildings. That was the conclusion of a committee of faculty members from Amherst, Mount Holyoke, and Smith Colleges and the University of Massachusetts.

Among specific findings:

- Students prefer small places for study where an individual can work alone or with one or two others.
- Large library rooms are disliked by most students as they produce distractions. Larger study halls should be broken up to reduce traffic and noise.
- Dormitories should be constructed to provide students with facilities where they can study outside their own rooms.

The committee also reported frequent complaints among students about poor lighting and heating and excessive noise.

The development of learning laboratories and individualized instruction machines was cited as a prime factor necessitating the changeover to small study and work space. As colleges require more independence on the part of students, this need will increase, the committee said.

* * *

LOOKING AHEAD: An "overall plan" for higher education in Illinois has been proposed by the Illinois Conference on Higher Education. The plan would "insure the best utilization of junior colleges, private higher educational institutions, and state universities in meeting the developing needs of Illinois youth."

Also recommended was broadening of the state scholarship program and establishment by the state of a $10 million fund for junior college construction on a matching dollar basis. Currently, the state provides scholarships—not to exceed $600 each—to 1,500 students. These must be used at Illinois schools.

* * *

TAX BITE: The Internal Revenue Service has virtually killed the "Pomona Plan," controversial fund-raising method used by colleges in the past few years.

Under the plan, an individual could transfer commercial stocks and bonds—which had appreciated in value since he had purchased them—to a tax-exempt institution and avoid paying the 25 percent capital gains tax. The college, in turn, was obliged to sell the stocks and bonds and invest the money in tax-exempt securities. Income from these securities would be paid to the donor and a secondary beneficiary until their deaths. Then the securities would become the property of the trustee institution.

However, in Internal Revenue Bulletin 1960-49, the IRS ruled that gains from the sale or exchange of transferred property by a trustee is part of the gross income of the donor; the capital gains tax must be paid. (Tax-exempt income realized from trust investments and paid to the donor retains its exempt status, however.)

IRS officials described the action as closing a tax loop hole, but college officials feel it has ruined a rich source of income.

The new ruling reverses a 1958 decision in which the IRS upheld the legality of the plan. According to the American Council on Education, $40 million in life income contracts drawn up under the plan reverted to colleges in 1959 alone.

* * *

NEW DOMINION: If Virginia residents have their way, there will be some drastic changes made in the state's schools. The Virginia Commission on Public Education, a special group appointed to study Virginia schools, has just completed a tour of the state on which they sought out citizen's complaints and recommendations.

Most common complaints:

- Elementary school libraries are below par and existing facilities are being improperly used as classrooms.
- Elementary schools are not doing enough either for bright pupils or retarded children.
- Summer schools should be financed by state rather than local funds.
- Not enough emphasis is placed on physical education in elementary school.
- Elementary school classrooms are overloaded with students. Teaching loads should be reduced so teachers can do a more effective job.
- Many teachers are not qualified in their subjects.

The Commission, headed by State Sen. William P. Spong, is sifting through the testimony preparatory to compiling a report to be submitted to the 1962 Virginia General Assembly.

* * *

MORE ETV: Thirteen additional ultra-high frequency channels are being sought by Florida's Educational Television Commission in order to operate educational stations. The state already has a five-station educational television network.

Commission chairman Judson Freeman of Jacksonville says the new stations would expand the educational network to encompass the entire state.

To put the new stations into operation, the Commission has filed a 1961–63 budget of $1,660,750 with the state legislature.

Since the Commission was established in 1957, Florida's ETV network has grown to the biggest such system in any state. It consists of VHF stations operating at Jacksonville, the University of Florida at Gainesville, Florida State University at Tallahassee, St. Petersburg Junior College, and in the Dade County (Miami) public schools. Most of the programs are broadcast on open circuit, making them available to some 3.6 million home viewers. This is in addition to the 300,000 college and high school students who use the televised instruction.

* * *

"OPERATION ALPHABET": A campaign to improve literacy in the Philadelphia area gets underway the end of this month. Organized and sponsored by the board of education, the Junior Chamber of Commerce, the Council of Churches, and the Philadelphia Foundation, the program is aiming for 200,000 new adult readers when its first phase ends in June.

"Operation Alphabet," in the form of a series of early-morning television programs, will attempt to raise these new readers to at least a fourth grade reading level.

Robert H. Coates, director of school extension, says Philadelphia is the first major city in the country to have a project of this type. Lessons, televised from 6:30 to 7 a.m. Monday through Friday, can be picked up within a 70-mile radius of the city. Students can view them at home or in classes in centrally located schools or neighborhood centers. A $3.50 fee will be charged for lesson materials, but scholarships are available.

* * *

ON RAMPAGE: The nationwide total of crimes increased by 11 percent in the first nine months of 1960 over a similar period a year ago. FBI reports show that smaller cities (between 100,000 and 250,000 population) were chiefly responsible for the sharp increase. These cities recorded a 14 percent jump. Big city crime rose less sharply, while rural areas showed only a 5 percent increase.

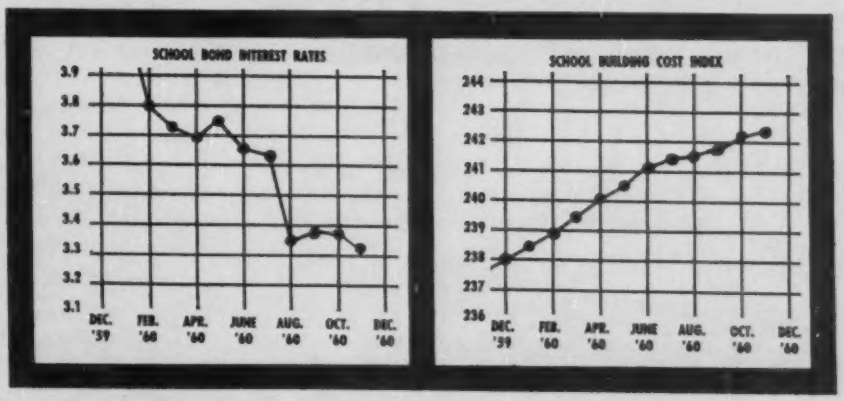
* * *

EDUCATION CENTER: The 1964–65 World's Fair, to be held in New York's Flushing Meadow Park, may become the site of a permanent national center of science and education.

The federal government was asked to establish the center, to be known as The Franklin National Center for Science and Education, as its exhibit at the Fair by Robert Moses, Fair president. Located on a seven-acre plot, the center would cost the government $30 million for the building and exhibits it would contain. It would consist of an inverted bowl 500 feet in diameter, according to preliminary sketches by Wallace K. Harrison, head of the Fair's design board.

The idea was to make the center a continuing history of the nation's achievements in science and education. It would feature "live demonstrations"

BUILDINGS & BONDS: School bond interest rates dipped again in November, averaging 3.32%, while building costs kept inching up, settling at 242.2 for the month.



and would give visitors a chance to take part in scientific experiments under the supervision of experts. In his statement, Moses said: "The United States government exhibit should present graphically and convincingly in impressive surroundings the immense strides we have made under our free democratic system."

* * *

NEW TECHNOLOGY: The effect of technological developments on teaching will be the subject of an eighteen-month study by the National Education Association. The U. S. Office of Education has provided $102,980 under the National Defense Education Act to support the research.

New developments in television, teaching machines, learning laboratories, and the more conventional audio-visual materials will be examined in relation to the problems and opportunities they create for the teacher.

Directing the study will be James D. Finn, professor of education at the University of Southern California and president of NEA's department of audio-visual instruction.

* * *

DOUBLE DUTY: A suburban Connecticut community has solved its dual school bus problem—with teachers.

When not enough bus driver applications were received in Weston, teachers were offered the job. This year, teachers are driving six of the town's ten school buses. The teacher-drivers—three from elementary school and three from junior high—make about $1,000 a year extra.

An unlooked-for benefit resulted when school officials noted a marked decline in rowdyism on the buses. The minute the students step on the bus, even though they're five miles from school, the presence of a teacher has a quieting effect, explains Gilbert Brown, school transportation officer. The buses are always clean and there's no discipline problem, he adds.

The program has also helped Weston in the highly competitive teacher market in the "commuting belt" of Connecticut. The opportunity of earning an extra $1,000 has been an inducement to many undecided teachers, bringing them to Weston, says Brown.

The plan has worked so effectively that two neighboring communities are considering adopting it for next year.

* * *

THE UNFIT AMERICAN: U. S. youngsters have just failed another test, this one in physical fitness given by the American Association for Health, Physical Education, and Recreation. In a comparison with British youngsters (10–17) American children trailed in almost every aspect of physical fitness.

The tests, given to 10,000 British boys and girls, were the same ones given to millions of American youth a few years ago. An earlier comparison with Japanese youth, based on the same tests, revealed similar deficiencies among Americans.

In seven different tests British girls scored ahead of U. S. girls in all seven, and British boys finished ahead of U. S. boys in six. American boys excelled only in "arm power."

AAHPER said American youth "certainly does not display good physical fitness when looked at by this criteria." They added that the results "should provoke serious thought and stimulate universal, organized action before it is too late."

* * *

RELIGIOUS INDECISION: A lower court decision that public funds may not be used to pay tuition for pupils who attend two Burlington, Vt., parochial schools is being reviewed by the State Supreme Court. The lower court had ruled unconstitutional a state law providing for these tuition payments.

One hundred forty-one students from South Burlington—which maintains no high schools—have been attending Burlington's two Catholic schools.

Governor-elect F. Ray Keyser, appearing as attorney for plaintiff C. Raymond Swart of South Burlington, declared that paying tax funds to sectarian institutions was prohibited by both the federal and state constitutions.

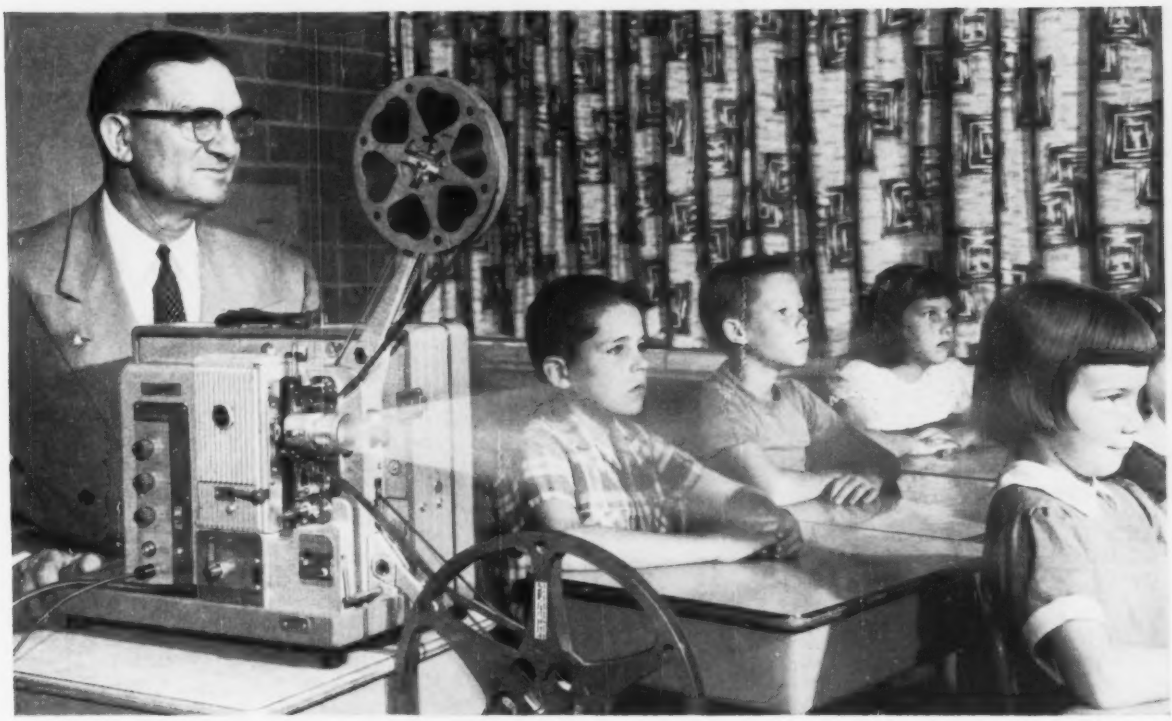
The South Burlington school board has indicated it will carry its appeal to the U. S. Supreme Court if necessary. It contends that paying tuition from public funds for parochial school students does not violate the doctrine of separation of church and state.

* * *

POTPOURRI: Surplus electronic components, valued at $15,000, were presented to the New England School Science Advisory Council by Baird-Atomic, Inc. of Cambridge, Mass. They will be added to a reservoir of scientific equipment maintained by NESSAC for use in New England high schools. . . . A survey has been initiated by the Ohio Bookmen's Club to determine the expense per pupil for textbooks and other instructional materials. The Club, composed of Ohio representatives of 53 publishing firms, expects to release results early this year. . . . Language enrollments in New York City schools have jumped 11 percent from last year. The number of students studying Russian is four times greater than 1959–60 enrollment, the first year Russian was offered. Spanish (the most popular), French, and Italian also registered increases, while Latin held its own. . . . Private elementary and secondary schools in 37 states have received loans of $1.7 million from the Office of Education for purchase of equipment or necessary remodeling of facilities in the teaching of science, mathematics, and modern foreign languages. An additional $6.48 million has been allotted for the current fiscal year under terms of the National Defense Education Act.

Circle **OV-114** on reply card, last page

At the new Monroe Elementary School, Monroe, Iowa, selected by A.A.S.A. for its exhibit of outstanding school designs, R. J. Hekel, Superintendent, says:



"We're convinced that A-V increases learning efficiency by 20 to 30 percent."

"Even slow learners grasp meanings quickly when they see a subject in context.

"After showing a movie on rural fire prevention, for example, nearly every pupil readily understood basic concepts of the subject. Before A-V, it was a slow process, sometimes tedious, to drum home the same subject.

"We frequently show movies—and we take care to see that they add to the learning experience.

"To show our movies, we selected the quietest, easiest-to-operate 16mm sound projector we could find—the KODAK PAGEANT PROJECTOR.

"Its quiet operation is not distracting, and we usually don't have to show a new teacher or student more than twice how to operate it with ease. This means we don't have to lose valuable class time.

"We must move our projectors about the school, so we don't like cumbersome, heavy machines. This Kodak Pageant is as light as any we've seen. And we know there's good reason for this projector's weight. For instance, from our examination of the sound amplifier, we found this to be a quality sound system, obviously not skimped on in manufacture. This sound quality is exactly what we need to accommodate showings in either classroom or auditorium."

Test the Kodak Pageant Projector yourself. See how easy it is to set up, how quietly it operates. Call your Kodak A-V Dealer for a demonstration, or write for Pageant Bulletin V3-22. No obligation, of course.

Kodak Pageant Projector 〉 **EASTMAN KODAK COMPANY,** Dept. 8-V, Rochester 4, N.Y.

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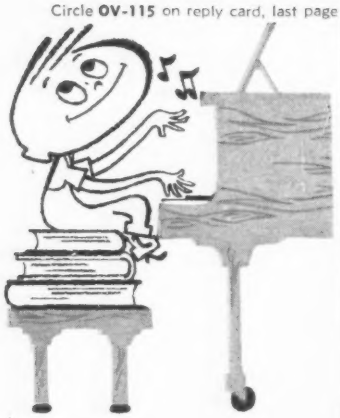
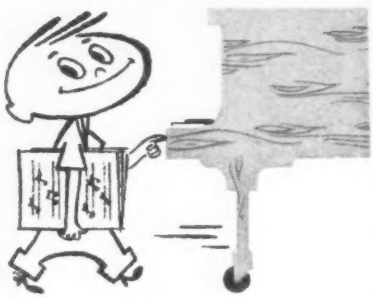


You don't have to be BIG



if it's on BASSICK'S

You don't have to be big to move things on Bassick casters. We can do it. Teacher can do it. She doesn't have to call the janitor. Bassick casters roll easily and don't mark floors. No one is supposed to mark floors. Bassick casters can help any school. Where else can they help in yours?

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CLOSE-UPS

Educator with a blueprint.

Carl Hansen

CARL F. HANSEN, superintendent of schools in the nation's capital, might well be called an educational heretic. He doesn't put much stock in the pat answers so readily offered to silence critics of education and he believes that much educational dogma needs re-examining.

He finds American education cluttered with practices which have no scientific backing and cites the widely held view that children should not be taught to read until they reach a mental age of six and a half years. Such a rule he calls "abstract, unscientific, and mythological," maintaining that "there is no such thing as a finite mental age of six and a half."

A close examination of Washington schools shows that Hansen has been able to put many of his ideas into practice. District schools are considered to be among the most dynamic in the nation. Certainly they are one of the best publicized (*Time*, Feb. 1 and Oct. 31, Nov. *Atlantic Monthly*). One of Hansen's chief accomplishments was the opening this past fall of the new Amidon elementary school. An experimental school, Amidon draws its enrollment from all parts of the city into a special program designed to test Hansen's view that instruction should be better organized and more demanding.

The demonstration, conceived by Hansen over a year ago, gives the teacher a dominant role in the classroom. A good teacher "just can't sit around with a little group listening to children recite," he says. She has a blackboard and a piece of chalk and teaches.

All eyes were on Washington in the fall of 1955 when district schools were among the first in the South and border states to desegregate. Because of the large portion of Negro students (now about 80 percent of the enrollment) many educators believed there would be a drop in academic standards. Hansen has rigidly maintained high academic performance, however, and now reports that "integration has apparently not retarded the advancement of high ability students—Negro or white." In fact, Hansen finds an overall rise in achievement levels.

Hansen, 55 years old this month, is a native mid-westerner. He was born in Nebraska, attended public schools there, and received his bachelor's and master's degrees from the University of Nebraska where he majored in English. He received his E.D. from the University of Southern California.

John Perkins

UNIVERSITIES HAVE to be run by professionals who understand their administration and operation. It's not a job for a retired businessman or military leader, declares John A. Perkins, president of the University of Delaware and newly elected president of the Association of Land Grant Colleges and State Universities.

The 46-year-old Perkins thinks it's

5 Metal Work Stations For $1,650

The sons and grandsons of these five boys can learn metal working on these same Di-Acro machines—they're boyproof to the core!

And now your school can have these famous five Di-Acro machines at a saving of $185! Order them now in one "Package Deal" for only $1,650, compared to the regular single-item price of $1,835. This is oftentimes no more than what you would pay for a single machine in other areas of shop instruction. Di-Acro Package Deal above includes:

- Spartan Model No. 24 Di-Acro Roller, 24" width, 20 gauge capacity.
- Spartan Model No. 24 Di-Acro Box and Pan Brake, 24" width, 16 gauge capacity.
- Di-Acro Notcher, 16 gauge capacity.
- Spartan Model No. 36 Di-Acro Shear, 36" width, 16 gauge capacity.
- Shear stand, welded steel, 33" high, storage shelf
- Di-Acro Bender No. 2 capacity ½" bar, ¾" tube
- Bend-R-Pak No. 2, bender accessories
- Bender Stand, welded steel, 33" high, two shelves
- Machinery Table, 72" x 36", welded steel, shelf

This group of machines represents a complete range of metal forming processes. Anything that can be cold formed in a variety of materials, ie.— sheetmetal, bar and flat stock, tubing, etc., can be demonstrated and duplicated by your students.

Remember, this is just one of eight Di-Acro "Package Deals" in arrangements to fit all school needs and to fill out equipment you may already have. Every one is an outstanding bargain on the longest lasting boyproof equipment you can buy!

Send coupon for full information—today!

You reflect the materials and processes of industry with:

pronounced die-ack-ro

di-acro PRECISION METALWORKING EQUIPMENT

O'NEIL-IRWIN MFG. CO.
406 Eighth Avenue, Lake City, Minn.

☐ Please send me complete information on your "Package Deals" for school workshops.

☐ Please send me complete information on your project materials for classroom use.

NAME_____

POSITION_____

SCHOOL_____

ADDRESS_____

CITY_____ STATE_____

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what do you require in Program Clocks?

ACCURACY	SIMPLICITY	LOW MAINTENANCE
Programs set by turning clock hands; assures perfect synchronization. Push buttons for special signals.	Simple yet rugged construction. Compact gray steel case. Easy to install.	Simple and reliable for maintenance-free operation. Design proven by 25 years of dependable service.

Montgomery gives you all three!

MODEL A

More and more schools are replacing complex, high-maintenance systems with Montgomery Synchronous Program Clocks. Get all the facts — ask your school supply dealer or

Write today for literature!

MODEL M & L

Montgomery MFG. CO., INC.

OWENSVILLE, INDIANA

• AUTOMATIC CALENDAR SWITCH REGULATES SIGNALS ON DAYS, NIGHTS AND WEEKENDS, PROVIDES ALTERNATE SCHEDULE OPERATION

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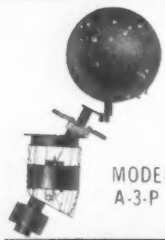
SPACE SCIENCE LABORATORY



MODEL A-3-P

The Spitz Planetarium enables the teacher to generate the fundamental understanding of scientific methods basic to all sciences.

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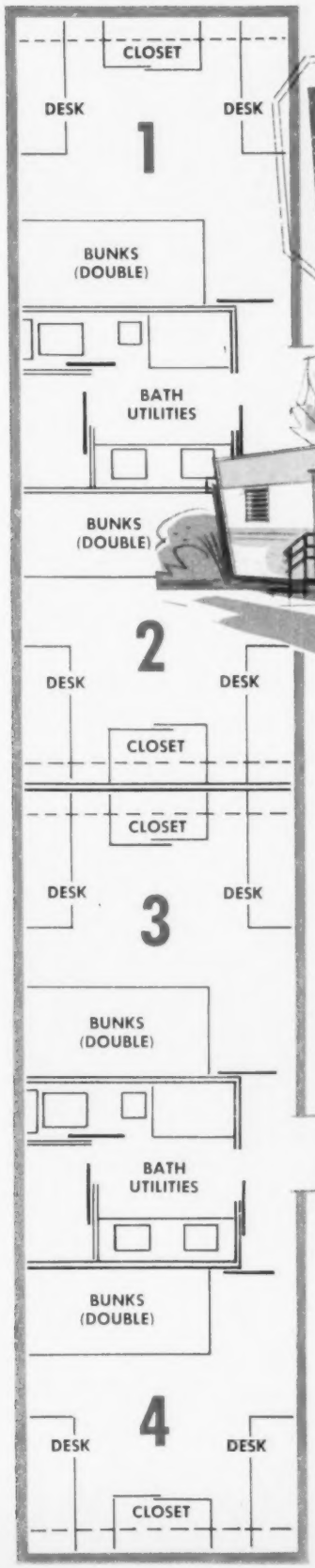
Close-ups (continued)

Head of Land Grant Colleges.

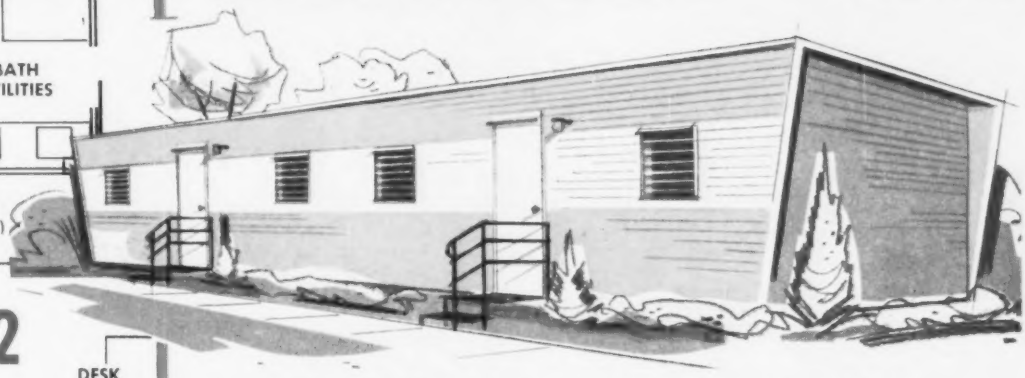
a tremendous advantage if a college president has "a lifetime of experience" in the field. He cited one more important qualification: "A college president should be a scholarly person—even though he doesn't have time to be a scholar—with ubiquitous interests." The best college president, Dr. Perkins has stated, is "a generalist who has developed out of a particular field."

Dr. Perkins might be said to embody these qualifications himself. A native of Owasso, Michigan, he went to the University of Michigan with the idea of becoming a lawyer. He majored in political science and, because he graduated in the midst of the depression years, got a teacher's certificate "to be on the safe side." After a year as an aide to the late Senator Arthur H. Vandenberg, he returned to the University as a teaching fellow and earned his Ph.D. in 1941 in political science.

His outside activities over the past ten years have given him special insight into his own problems at the University of Delaware. In 1957–58 he was the American member of UNESCO's executive board. During the same period, while on leave from the University, he served as undersecretary of Health, Education, and Welfare to Secretary Marion Folsom. In 1959, one of his most interesting assigments made him a member of the three-man fact-finding board which mediated the prolonged steel strike. He is presently a trustee of the



EMERGENCY DORMITORY UNITS



MOBILE DORMITORY UNITS NOW AVAILABLE FOR CROWDED SCHOOLS, COLLEGES, UNIVERSITIES

Mobile homes "go to college" to supply inexpensive living quarters for the ever rising number of students looking for on-campus housing. Each Mobile Home contains four 2-man dormitory units; each unit is designed to meet the special needs of campus living . . . with streamlined desks, bunk-type beds, and plenty of space for storage and "lounging." These dormitory Mobile Homes not only provide an economical solution to the growing housing problem our schools face today, but they are highly attractive additions to any campus as well.

Study section is placed beneath large airy window for maximum lighting.

Space saving bunk-type beds for healthful rest and comfortable lounging.

WRITE NOW for FREE LITERATURE!

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Close-ups (continued)

Committee on Economic Development.

He also enjoys writing and has published some sixty articles in the past twenty years. He has written three books—his latest, *Plain Talk From a Campus,* came out last year. It is a collection of essays dealing with university financing and relations of the university to public service.

In spite of his varied activities—or perhaps because of them—Perkins enjoys life. He is a great believer in physical exercise and enjoys nothing better than a fox hunt or game of golf. For more quiet relaxation he turns to painting.

Candids . . .

Commissioner of Education **Lawrence G. Derthick** has announced his resignation, effective January 19, to become assistant executive secretary of the NEA.

George J. Collins is director of the new School Plant Planning Laboratory established by the University of New Mexico and the State Department of Education. Dr. Collins was formerly assistant chief administrator in Hartsdale, N. Y.

Gov. Buford Ellington of Tennessee has been named to succeed Gov. Cecil H. Underwood of West Virginia as chairman of the Southern Regional Education Board.

Rev. Laurence J. McGinley, president of Fordham University, has been elected president of the Association of Urban Universities.

Dr. Murray G. Lee, director of the American Bankers Association, becomes director of ABA's Stonier Graduate School of Banking.

Charles F. Carroll, North Carolina's superintendent of public instruction, is the new president of the Council of Chief State School Officers. **Louis Bruno,** superintendent at Pullman, Wash., was elected state superintendent of public instruction to succeed Lloyd J. Andrews, unsuccessful candidate for governor.

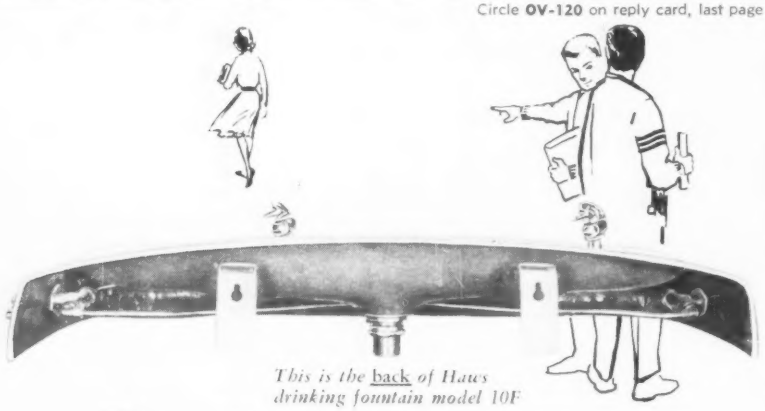
Evart W. Ardis, director of Bureau of Appointments and Occupational Information, University of Michigan; **Alfred W. Beattie,** superintendent of Allegheny County schools, Pittsburgh; and **Irby B. Carruth,** superintendent of Austin, Texas, schools, have been nominated in the primary ballot for president elect of the American Association of School Administrators.

Dr. Erling N. Jensen, professor of physics at Iowa State University and senior physicist at the Ames, Iowa, Institute for Atomic Research, has been chosen president of Muhlenberg College, Allentown, Pa.

The Rev. Laurence V. Britt, S. J. has been named president of the University of Detroit. He had formerly been dean of the school's college of arts and sciences.

Dr. Thomas H. Henderson has been installed president of Virginia Union University in Richmond. Dean for the past 19 years, he becomes the first layman to head the Baptist-related university for Negroes in its 95 years. ●

Circle **OV-120** on reply card, last page



This is the back of Haws drinking fountain model 10F

Look at the Back for a change!

From the front Model 10F is a beauty in colorful fiberglass – but it is HAWS **unseen** quality that truly backs it up. Careful craftsmanship is from the inside out! This dual-bubbler model, heat and pressure laminated with reinforced fiberglass, has hidden features: exclusive flow controls, vandal proof accessories, easy-to-use wall hangers and overall strength.

And let's face it....

As the passer-by sees it, Haws Model 10F has all the styling distinction that makes HAWS the unanimous choice for beauty.
Specification sheets will be sent on request – or write for the complete HAWS 1961 Catalog.

Since 1909 HAWS **DRINKING FOUNTAINS**

a product of
HAWS DRINKING FAUCET COMPANY
1441 Fourth Street – Berkeley 10, California
Export Dept: 19 Columbus Ave., San Francisco 11, California

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R. C. HUNTER. ASSOC. SUPERINTENDENT, BAKERSFIELD CITY SCHOOL DISTRICT.

Bakersfield, California, finds Royal Electrics "inexpensive to maintain."

"We've been using Royal Standard and Electric typewriters for several years," says Mr. Hunter, "and in those years we've found them very satisfactory. Royals are easy to operate and inexpensive to maintain." Which are two good reasons, Mr. Hunter, why over half the typewriters in the nation's classrooms are Royals.

Mr. Hunter also mentions another Royal plus:

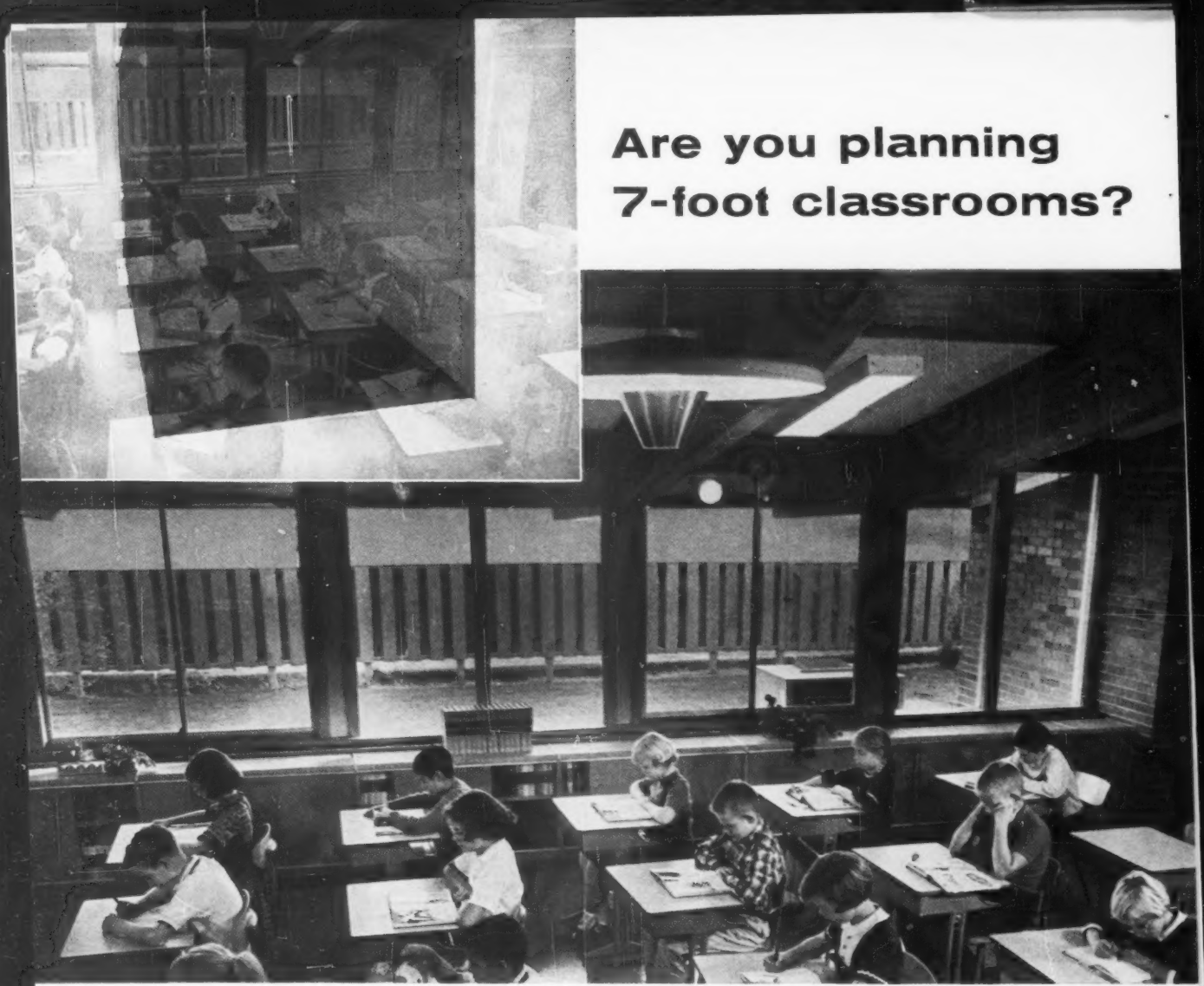
"The service received from our local Royal Representative is always prompt and courteous."

And that's a nearly universal response from all school administrators and teachers to Royal service. You'll find that when your typewriters need maintenance, service is fast and dependable.

Why don't you investigate the beautiful new Royal Electric typewriters? You'll be glad you did. Call your Royal Representative for a free demonstration. Arrange for a classroom trial, if you like, at your convenience.

ROYAL® ELECTRIC

PRODUCT OF ROYAL McBEE CORPORATION. WORLD'S LARGEST MANUFACTURER OF TYPEWRITERS.

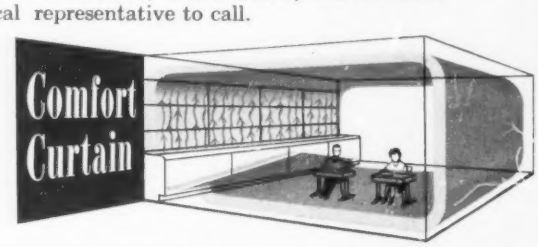


Are you planning 7-foot classrooms?

Then why provide only 7 feet of perimeter air distribution?

COMFORT CURTAIN® gives true perimeter air distribution—at uniform velocity—*along the entire exterior wall* of any classroom. This curtain of moving air blankets the entire outer wall and windows. It sets all the air in the room into gentle motion—to eliminate cold spots, drafts and areas of "tired" air. A processing unit in each classroom controls, blends and filters warm air, fresh outdoor air, and return air as demanded by conditions in that particular room. "Day-nite" thermostats, with non-occupancy settings, control these units to permit substantial fuel savings and economical after-hour use of individual rooms. The minimum structural requirements of COMFORT CURTAIN and its ease of installation reduce both initial and over-all costs. Servicing is handled by a qualified local heating contractor. For complete information about the COMFORT CURTAIN System and its use with all types of heat sources, write LENNOX, 521 S. 12th Ave., Marshalltown, Iowa. If more convenient call your nearest Lennox office, listed below, and ask for a technical representative to call.

LENNOX®



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...Only

LENNOX

Comfort Curtain® provides full room ventilation

PLUS...

Ease of expansion... flexibility
Economical installation & operation
Individual room control

Eugene Field Elementary School, Springfield, Missouri.
W. J. Graff, Superintendent;
C. A. Martin, Jr., Board President
Matthews and Hillman, Architects & Engineers

COMFORT CURTAIN modular design permits economical future expansion. New units can be added easily when more rooms are needed. Expensive duct and piping are not required. Initial costs for heating and ventilating this school were only $1.19 per sq. ft. of building. COMFORT CURTAIN ducts—with attractive built-in bookshelves—supply full perimeter air distribution along the entire exterior wall of each classroom. "Day-nite" thermostats, with "no-occupancy" settings, save fuel and make after-hours use of individual rooms economical. Temperatures are maintained with ½° of control settings. Immediate response rapidly adjusts thermal environment to the changing requirements and uses of each room.

ECONOMIC SCENE

Breaking the Poverty-Ignorance Cycle

TWO-THIRDS OF the world's population still lives in small agricultural villages. Possibly two-thirds of this population is illiterate. In most cases, their production methods are primitive, their agricultural output is low, and their personal income is, of necessity, abysmally small.

It is difficult to show poverty-stricken and illiterate people how to improve their means of livelihood. Some method has to be found to break into the cycle of ignorance causing poverty causing ignorance. A program of education geared to improving living standards and reducing illiteracy seems to be the most efficient combination. It is fairly easy to generalize on solutions to this problem, but it is extraordinarily difficult to apply them.

The difficulty is caused, in part, by the fact that every country is different, every section of each country is different, and every village has its special problems. The difficulty is compounded by the lack of research on how best to accomplish this world-wide task.

What success there has been in individual instances has probably been caused as much by enthusiasm and good luck as by any reasonably validated way of doing the job. Even when research is done, it often merely duplicates work that has already been done somewhere else. The following story illustrates this difficulty.

A few years ago I was working in a small, largely agricultural country of some ten million population. The farmers were being taught to use better agricultural machinery and it was decided that they should also be trained to fix the machinery if it broke down. Engineers from abroad were hired to prepare detailed explanations and drawings showing how to repair each part of the machines. Even though this took a large fraction of the funds available for the training program in these agricultural villages, it looked like a sensible thing to do. Later it was learned that all of these explanations and drawings had already been made in another country and could have been had for the asking.

This repetition of ground-work happens all around the world in almost all fields of education. We have poor facilities for adding onto research, for going on from what has been tried and approved and applying these results to new problems. At the present stage in world affairs, repetition is too costly, both in money and in time. We need to find better methods for spreading the results of experiments in education. We also need to design

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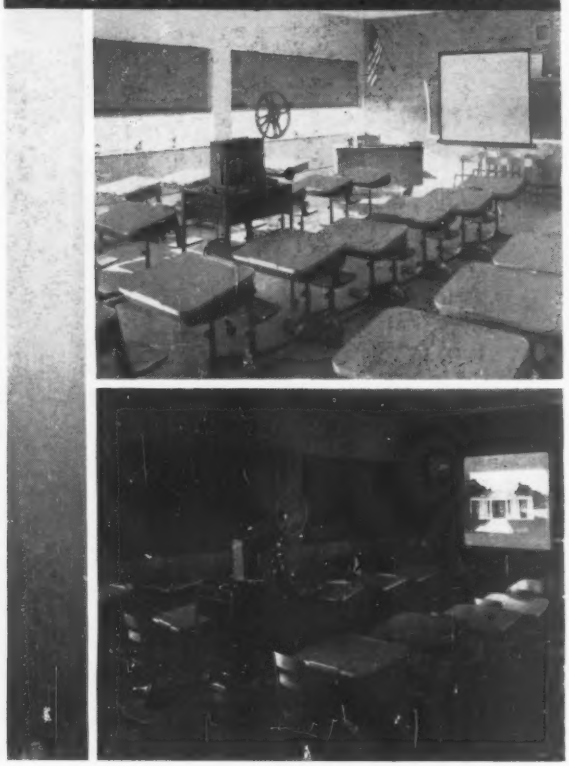
TURN ANY CLASSROOM INTO A PERFECT VIEWING ROOM



at amazing low cost

TEMLITE LOOMWOOD

AUDIO VISUAL SHADES

PERFECT DARKENING

Experts agree that for best visual results a viewing area should be "browned out" (a light level at which ordinary newspaper print is difficult, but not impossible to read). Temlite Loomwood Audio Visual Shades are scientifically engineered for proper daylight control.

PROPER VENTILATION

If a room is too dark or too hot the students' attention suffers. With Temlite Audio Visual Shades, even with the blinds completely down, you have adequate between-splint air circulation so the viewing room is never stuffy. Ordinary blinds and shades can't compare with Temlite Audio Visual Shades for light and air distribution.

● **MAINTENANCE FREE:** Sturdily crafted of beveled basswood splints, Temlite is available in 12 sparkling enameled colors, or in recommended audio visual colors of Grey Green or Mocha Tan. Usually require only annual cleaning.

● **PERFECT WINDOW FIT:** There are no "Standard sizes". These outstanding shades are custom tailored to fit your windows, yet are available at low cost. Easily adjustable for uniform window appearance.

WRITE FOR FREE ILLUSTRATED CATALOGUE ON NEW SCHOOL DAYLIGHTING CONTROL PRODUCTS

The AEROSHADE COMPANY

A Division of Consolidated General Products, Inc.

P. O. Box 559 Waukesha, Wisconsin

Economic Scene (continued)

educational processes and experiments that will add to present knowledge. One of the best ways we can assist the newly developing countries is by helping them to build upon what has been tried in other places.

Building Cost Recap

SCHOOL BOND interest rates started the year 1960 at 4.13 percent and ended at about 3.3 percent. Average for the year was 3.57 percent. Compare this with the record of a decade ago: 1950 started at 2.08 percent and closed at 1.88 percent, averaging 1.94 percent.

The rise in interest rates during the past ten years peaked in 1959 when the Federal Reserve Board tried to raise interest rates to slow down the expansion of credit. Through most of 1960 the Board tried to reverse the pattern, expanding the credit base and lowering interest rates. What the policy of the Board will be during this year could be determined in large part by the course of business; it may continue its policy of easing credit to encourage further expansion of business.

The steady rise in building costs during the decade slowed down to a 2 percent gain during 1960. Contractors became willing to bid more closely in order to get the business. A number of school boards were able, in fact, to build school buildings for less money in 1960 than in 1959.

—HAROLD F. CLARK

Representative Bond Issues

(From Oct. 26 to Nov. 29, 1960)

School District or College	*Amt. in Millions*	*Moody Rating*	*Net % Interest*
Ariz: Maricopa Co Scottsdale			
High School #212	$1.995	Baa	3.34
Elementary #48	1.95	Baa	3.317
Cal: San Juan Unified	4.27	Baa	4.0208
U of Cal Student Ctr Rev	3.7	NR	2.875
Ill: U of Ill Un & Health Ctr			
Series A	5.2	NR	3.8916
Series B	2.75	NR	3.125
Ky: U of Kentucky (Bldg Rev)	8.	NR	3.959
Mich: Saginaw Tp Comm	2.975	Baa	4.0646
St Clair	1.325	*A	3.7419
Riverview Comm	3.2	Baa	4.078
Minn: Rochester Spec #4	2.5	A	3.3403
Nebr: Douglas Co #66	1.	A	3.5833
N.J.: N Burlington Co Reg	1.21	*Baa	3.8828
Ohio: Ashland	3.45	A	3.428
Youngstown City	1.96	A	3.407
S Euclid-Lyndhurst	1.05	Baa	3.68
Okla: Oklahoma Co Ind #1	1.17	A	2.91451
Tex: Ysleta Ind	2.	Baa	3.61973
Spring Branch Ind	2.	Baa	3.921
Wash: U of Washington (House Rev)	2.05	NR	3.

*—*provisional* *NR—none assigned*

Compiled from The Daily Bond Buyer

Circle OV-124 on reply card, last page

Germ-Laden Dust!

CUT SWEEPING TIME

Don't just push dust around–pick it up with SUPER HIL-TONE® surface maintainer, and get rid of it once and for all. Saves labor time–protects against spread of air-borne bacteria –helps save the floor and improves appearance.

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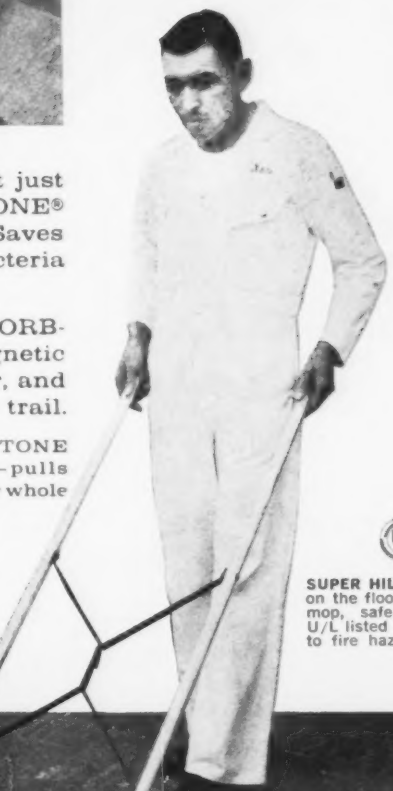

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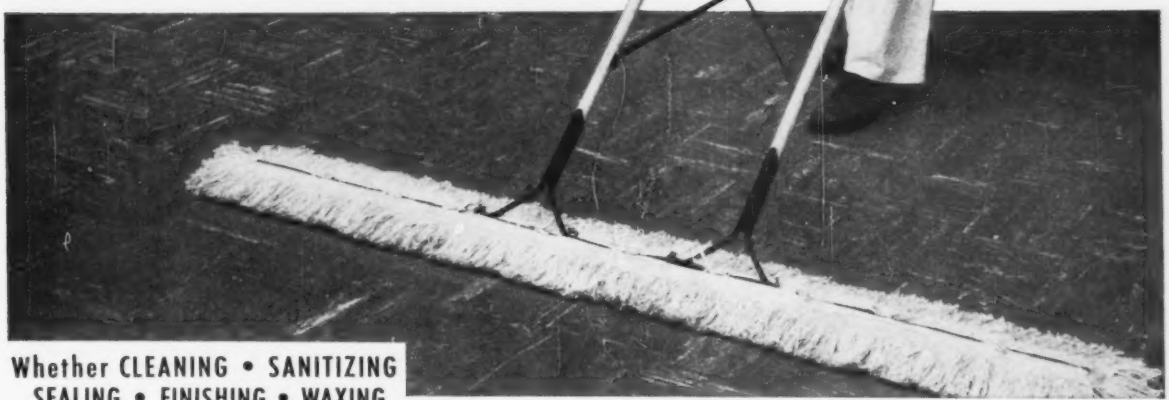

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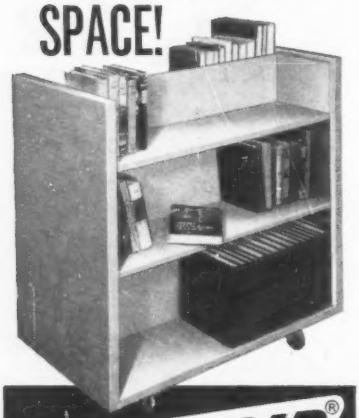

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SEARCHING THROUGH RESEARCH

Split-level Homes and Impoverished Schools

THE POPULATION explosion is putting the squeeze on school districts that rim the nation's cities. The rate of growth in the suburbs is almost three times that of the cities and more than double that for the country as a whole. The redistribution of the school age population becomes serious when it is not rematched to an adequate tax base.

This is the growing problem of schools in suburbia, further aggravated by the obsolete and inefficient type of school organization generally found there. Many suburban districts do not have an industrial or commercial tax base, and only in rare instances is it possible to support an adequate school system through local resources if the tax base is limited to residential properties. Yet, attempts to reorganize school districts on a community-wide basis are generally rejected by local district residents.

Extent of this problem is seen in the consequences of school district segmentation in the metropolitan area around Flint, Michigan.

Comparison between Flint and its suburbs shows that the fringe area contains 25 percent of the taxable wealth but 34 percent of the children in school. And among the districts in the fringe, one contains 36 percent of the taxable wealth but only 10 percent of the children. Further, the city school district has a school population of 36,000 while the twelve fringe districts together serve half that number. Nine of these districts attempt to provide a K-12 program, though only two of them have more than 300 high school students. By comparison, the public high school enrollment in the city of Flint is over 4,500. In the fringe, recent graduating classes have dipped as low as twenty-one students; only one graduated more than 100.

Existence of several school districts within a single urbanized community is bound to result in marked inequalities in terms of taxable wealth among them. Around Flint, we find neighboring districts whose per membership taxable valuation ranges from $4,500 to $42,000. Thus, the one district has nearly ten times the valuation of the other for each child enrolled in school. Even the fringe district average of $12,000 per membership child compares unfavorably with the $19,000 for each child in the central city.

The proportion of operating costs derived from local taxation ranges from a low of 26 percent to a high of 76 percent. Ten of the districts derive a major portion of their operating budgets from outside sources which compensates in part for inequalities in local resources.

Local tax revenue for operations in the city amounts to $177 for each child in school compared to a $116 average for all fringe districts. However, in the fringe districts the per capita returns from local taxes range from $58 to $359, and in seven districts it is less than $100. As an example of the disparity here, one district with an 18.35 mills tax realizes only $77 for each child in school, as compared with $359 derived from an 8.35 mills tax in another district.

The uneven distribution of wealth inevitably affects the quality of program offered. It is likely to be reflected most markedly in buildings and equipment since these tend to be exclusively a local responsibility. It is among the fringe districts in particular that rented and temporary quarters are prevalent. Altogether several hundred children are housed in inadequate facilities—rooms in church basements and fire halls, school basement rooms not equipped

By Basil Zimmer, associate professor of sociology at Brown University, Providence, R. I.

for classroom use, and makeshift rooms in antiquated and poorly lighted structures.

The fringe districts were also found to lack specialized services. Only in isolated instances are there special programs for the physically handicapped, mentally retarded, and academically talented.

Perhaps the most significant gauge of inequality is found in the level of training of the districts' teachers. In the Flint city district only 15 percent of the elementary teachers are without a college degree as compared with an average of more than half of the teachers in the twelve fringe districts—and up to 80 percent in one district. At the high school level more than half of Flint's teachers have completed five or more years of college as compared with less than one-fourth in the fringe districts.

By all objective standards, the Flint case clearly shows the need for reorganization of the fringe districts. Yet when a random sample of those residents were asked to evaluate their schools, eight out of ten rated them equal to or better than schools in the city. This evaluation is so at odds with observed differences that it suggests a general lack of knowledge or a very low level of expectation in suburbia. Thus a solution to the problem is needed at the very time that local residents appear to be unaware that a serious problem exists.

The school problem, however, is only a small part of a much more complex problem—the segmentation of government in metropolitan areas. Efforts to accomplish political and administrative unification in metropolitan areas have met with almost uniform failure. Yet solutions to the school problem are bound up with an effective solution of the overall problem of local government in metropolitan areas. It is on the latter problem in particular that research attention should be focused. Thus, the problem is this: What are the roots of the resistance to the establishment of a single municipal government over the entire metropolitan community? When this is determined an effective solution to the school problem should be within reach. ●

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Photo above, Senior High School, Janesville, Wis. Law, Law, Potter & Nystrom, Architects.

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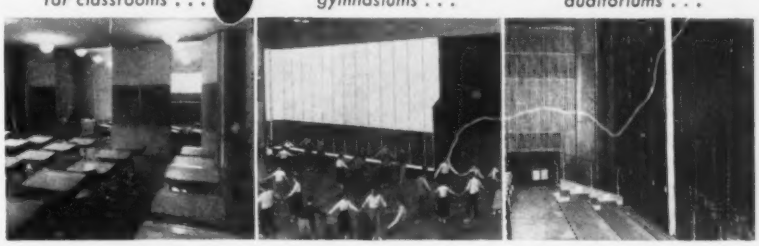

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School District For the Handicapped

THREE YEARS AGO the break came for the several thousand handicapped children in St. Louis County, Missouri. In December, 1957, a Special School District for the Education and Training of Handicapped Children was created to consolidate facilities and services for educating the mentally retarded, physically handicapped, and speech-defective children in the 500-square-mile county.

The Special District brought not only opportunity for the handicapped but relief for their overworked teachers. Up to that time, the county's handicapped children received limited special attention within their respective regular school districts.

State legislation made special education mandatory in districts that had seven or more handicapped children. Throughout the twenty-nine districts in the county there were thirty-four classes for the educable mentally retarded and thirty-eight speech correctionists. The district superintendents became dismayed at the lack of adequate facilities for serving the handicapped in the smaller districts and by the heavy load shouldered by the speech correctionists, some of whom treated as many as 180 children.

A bill proposing creation of the Special District was spearheaded by Milton Bierbaum, superintendent of the West Walnut Manor District, and was readily accepted by both houses of the state legislature.

The Special District has its own board of education, tax levying powers, and superintendent, Dr. Morvin Wirtz. It was financed by an extra property tax approved by the legislature and authorized by a six-to-one majority of the county's voters. The tax levies 10 cents per $100 assessed property valuation. The total district budget for 1959–60—its first operating year—was $1.5 million.

The district provides facilities and personnel at seventy locations for academic, therapeutic, and vocational training of some 7,500 handicapped children. "Our aim is to be at 90 percent of our service capacity within three years," said Dr. Wirtz in 1958. After one full year of operation he found the district at 80 percent of that level.

The district employes 200 teachers, nearly all with special education teaching certificates. Dr. Wirtz estimates that one-third of these have master's degrees plus additional post-graduate hours.

During a recent tour of the district, Dr. Richard S. Dabney, the state's director of special education, commented, "the Special District has made more progress in serving handicapped children in a shorter period of time than anyone had anticipated when this district was created." Here is a tally of that progress:

- The district conducts forty-three speech correction clinics for almost 6,000 students enrolled in regular district schools.
- Some 1,100 educable mentally retarded children are accommodated in seventy-four special classes held in districts over the county. Ninety percent of the trainable are instructed in regularly scheduled classes devoted to self-care and socialization.
- Crippled and orthopedically handicapped receive both academic training and orthopedic therapy, including electrical stimulus and hydro-therapy treatments, in specially equipped schools leased by the district.
- Acoustically handicapped, including normally intelligent aphasics who cannot speak because of brain damage, are accommodated in six classes geared to different abilities.
- Blind and partially-sighted children in the county are transported by the district to and from the Missouri School for the Blind. Private tutors work with those who have trouble with academic work. The district offers daily classes in braille and braille technique.

Dr. Wirtz's staff includes his associate superintendent and coordinators for the departments of orthopedically and visually handicapped, mentally retarded, and speech and hearing. The district also employs three supervisors to assist the coordinator of the mentally retarded program, a staff psychologist, psychological examiner, two social workers, liaison worker for vocational rehabilitation, and a registered nurse.

Transporting students within the district is another complicated problem. Covering 4,500 miles per day, the district's twenty-four own buses and twenty-five rented buses carry the orthopedically handicapped attending regular district schools as well as all Special District students. Routes are based on geographic concentration of students. Each bus picks up the children assigned to its route and a series of transfer points then breaks down the load according to schools. ●

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OV 177

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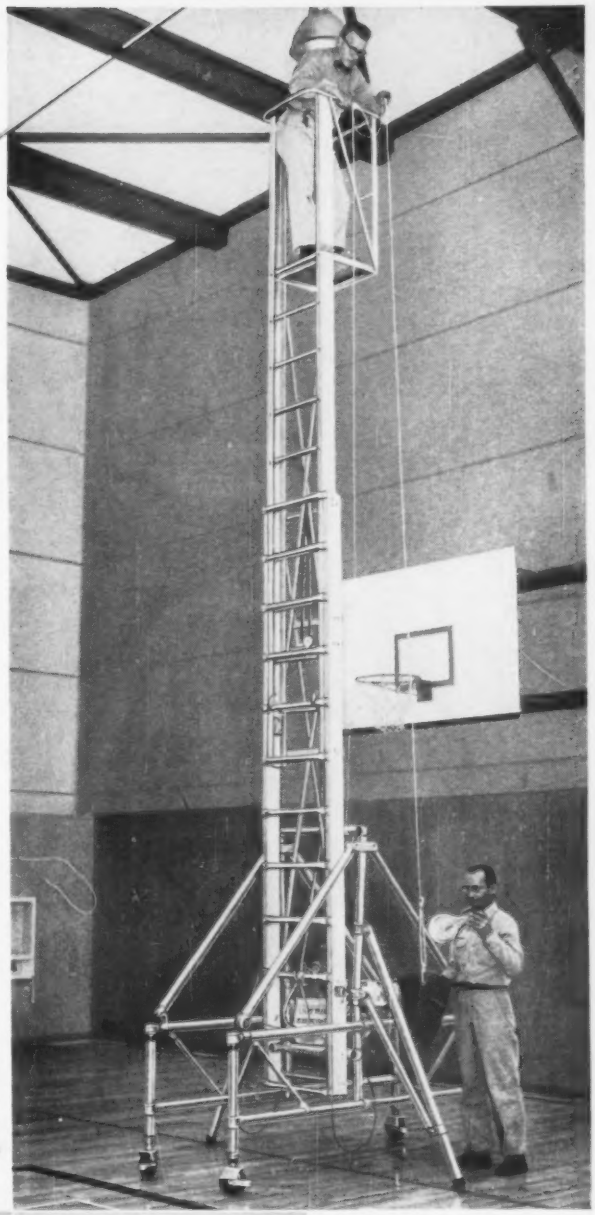

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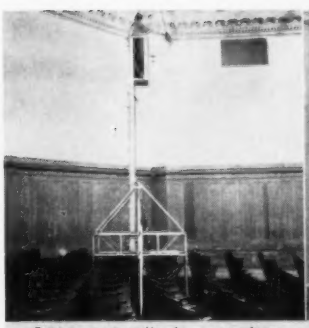

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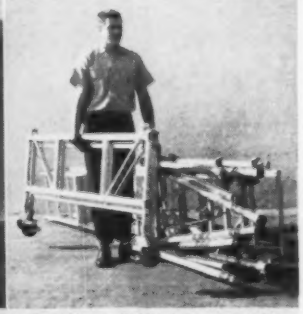

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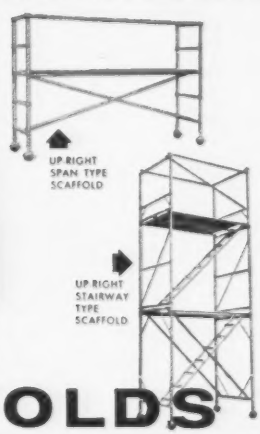

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Contracting for New Buildings

PROBLEMS OF planning new educational buildings don't end with the final OK of the blueprints. There is still the process of making legal arrangements with the contractors who will put up the facilities. Whether the building contract involves millions of dollars or a fraction of that, its execution is a complex legal process that is often over the heads of board members and school officials.

OVERVIEW's cross-country sampling of board policies and procedures on contracting revealed wide variation from district to district. However, it pointed up similarities that may serve as guides to school districts that are contracting for new schools.

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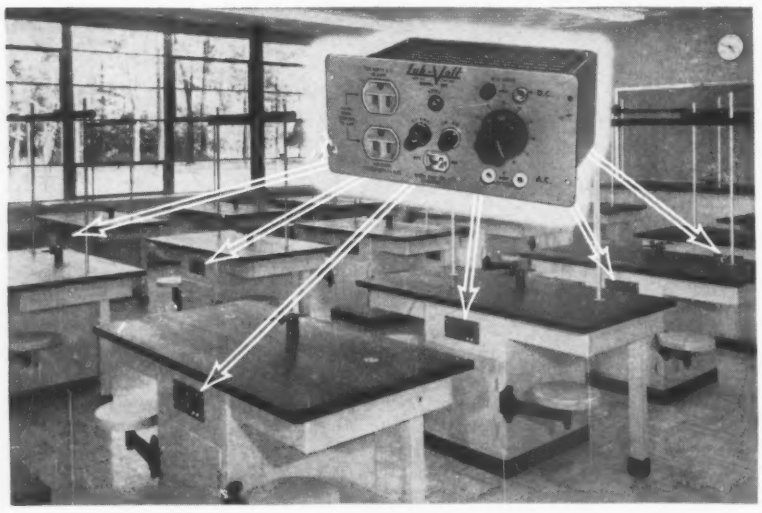

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Single vs. multiple contracts. It is mandatory in some areas for school districts to construct new buildings under multiple contracts (separate contracts for general construction, plumbing, heating, and electrical work). The alternative, left in some states to the discretion of the school district, is to employ a single contractor for all construction work. Slightly more than half of the school districts draw up single contracts. Several of the schools reporting multiple contracts include separate contracts for play areas, kitchens, iron and steel, and site development, as well as plumbing, heating, and electrical work.

Competitive bids. All of the schools let contracts for new construction on a competitive bid basis. The amount of time required to advertise bids prior to their opening ranged from five days (a district in New Jersey) to sixty (a district in Kansas). Average is two or three weeks.

Most states requiring that new schools be constructed on a competitive bid basis specify that the school district shall accept the lowest "responsible" bidder. In the last five years, 14 percent of the school districts turned down the lowest bidder, the most common reason being that they questioned the bidder's qualifications, responsibility, competence, or reputation. Other reasons included default of the lowest bidder, failure to submit a bid bond, excusable errors in the bid, or failure of the lowest bidder to meet specifications. One district reported simply that better service was expected from the higher bidder.

On the basis of recent judicial decisions handed down in Texas, California, Florida, Mississippi, and Massachusetts, boards have wide latitude in determining when to reject the lowest bidder in favor of a higher one. The burden of proof, in the absence of a statute to the contrary, rests with the rejected bidder to prove illegality, arbitrariness, unreasonableness, or fraud on the part of the board.

Guarantees of performance. Most districts base the responsibility of the bidders on their reputations and past performance. They judge bidder re-

sponsibility also on the basis of the architect's recommendation, the contractor's credit rating, the bond that he submits with his bid, certification of responsibility issued by the state (Mississippi), state registration (Virginia), and approval of the contractor by the school auxiliary.

Types of bonds most commonly required of contractors are bid bonds, reported by 87 percent of the districts, and performance bonds, reported by 88 percent. Seventy-seven percent of the districts require both. Only 11 percent of the districts require credit guarantees, 10 percent both performance bonds and credit guarantees, and only 9 percent all three. Other types required of contractors include payment bonds, labor and materials bonds, and a one-year guarantee bond.

School districts protect themselves against incompletion of contract by making only part payments to the contractor as work progresses or by withholding a percentage until the construction is found to be completely satisfactory. A few districts include a liquidated damages clause in their contracts, calling for a certain payment (around $75 per day) by the contractor to the board for each day that construction continues after the agreed completion date. One district uses a percentage basis, calling for a payment of 1/10 of 1 percent of the contract price for each day beyond completion date. Several districts that once used a liquidated damages clause have discontinued it because it "didn't do the district any good."

Contract forms. Majority of the school districts use the contract forms recommended by the American Institute of Architects, though some use forms supplied by their state departments of education. A few schools use forms drawn up by their architect or board attorney. Frequent practice in California is the use of forms supplied by the county counsel, county superintendent, or county district attorney.

Promising practices. School districts listed the following practices as most helpful in their contract negotiations: careful selection of the architect and school attorney; notification of all available contractors well in advance of proposed construction; approval of plans by the state board of health, state fire marshal, and the state education department; clear specifications, maintenance of friendly relations with the contractor; and display of bids to all bidders so each can check how he stands.

Sources of help. For advice during the contracting process, some boards rely solely on the architect, or board attorney, or superintendent, or special consultant. But most of them depend on a combination of sources for advice, most commonly the architect, board attorney, and superintendent.

Boards of education can negotiate construction contracts themselves. However, OVERVIEW found that most boards rely heavily on persons other than their own members for advice throughout the process. The degree of reliance on the architect, the board attorney and the superintendent emphasizes the responsibility these persons have in advising the boards of education they represent. •

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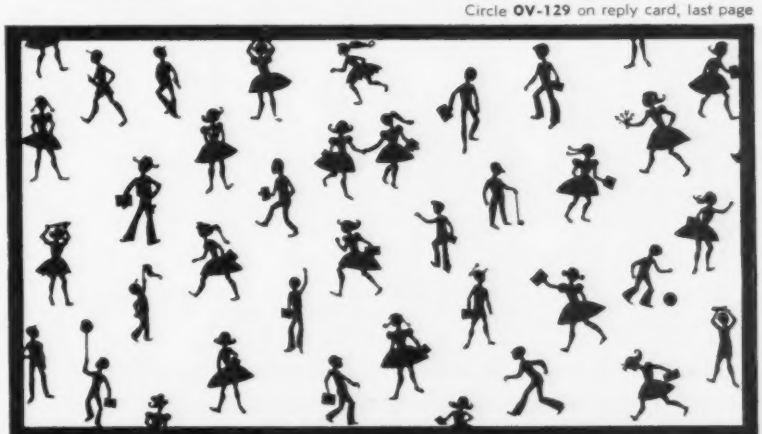

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OPERATION EXPORT

American educators are helping build and staff new schools in 43 emerging countries

by Edward Warner Brice

THE ROLL CALL to education is being heard around the world and the list of absentees grows steadily shorter. Credit America's export of educational expertise to the world's developing nations in Asia, Africa, and South America.

Many of these countries have attained independent, self-governing status only recently, in some cases since the last war. Many of their people are desperately poor, illiterate, and lack even the rudimentary skills to build their country's economy. Short on teaching facilities and trained manpower to convert their underdeveloped countries into thriving democracies, the governments have turned to the United States Government. They ask for help in developing the education programs they need to meet the "revolution of rising expectations" of their people.

In 1959, under provisions of the U. S. Mutual Security Program, authorized by Congress "to maintain the security and promote the foreign policy of the United States," forty-three countries shared with ours in joint programs of teaching and training designed to strengthen their economic and social structures.

The United States has by no means attempted to meet all of the educational needs in these joint-program countries. It has made clear that education is the domestic responsibility of each country. What our government has done is help organize education in countries that had no organization, train specialists, introduce technical skills, train personnel to teach those skills, develop teacher-training institutions, plan buildings, and prepare texts.

Programs for each country are planned jointly by members of the host government and specialists of the U. S. Operations Mission in that country. Meeting in the country's ministry of education, the planners discuss educational needs, determine what projects may be jointly undertaken, what the host country will provide, and what the U. S. will contribute. Generally, the U. S. supplies educational specialists and demonstration equipment. Host nations provide buildings, transportation, and services of local employees.

Here are some highlights of this operation export:

Mr. Brice is specialist in fundamental and literacy education with the U.S. Office of Education.

Primary education and teacher-training. Many of the countries cannot yet enforce compulsory schooling for a fixed period. The shortage of teachers and lack of educational facilities make compulsory education impracticable. Nearly all countries have the problem of drop-out after a year or two of schooling. Particularly in rural areas, many children do not remain in school long enough to ensure permanent functional literacy. (The Government of India once questioned whether four years of schooling was adequate to give permanent literacy and whether any shorter period was not national waste.)

A cooperative project in rural and teacher education in the Dominican Republic, begun in 1955, has increased the supply of teachers for a large number of rural schools.

In Guatemala, a cooperative program in rural elementary education, with normal school and affiliated demonstration schools, was started in 1946, cancelled by the Communist government in 1950, and reopened by the present government to include 400 rural schools. In 1954, 100 Guatemalan school teachers were enrolled in five Southwest U. S. universities for short courses in teacher-training.

The United States has assisted in developing Nepal's elementary system of five years' schooling that produced an increase in the enrollment from 150,000 children to 420,000 by the end of the country's Second Five-Year Plan. As of 1958, our government has helped train 80 percent of Nepalese teachers and opened 407 schools.

Of the 500,000 children in Thailand who reach school age each year, only 400,000 ever see the inside of a school, 50,000 complete the fourth grade, and 12,000 reach the tenth. To remedy this drop-out problem, the governments of Thailand and the U. S. have been working together to develop Thai's teacher-training institutions. In 1954, t' e student body of the Thailand College of Education consisted of only 200 men; today that enrollment exceeds 2,500 and includes women. The college also trains an additional 2,000 teachers, supervisors, and administrators in evening classes and summer courses.

Secondary and vocational education. Perhaps the greatest need in the emerging countries is for trained leadership—to fill the void left behind by departed colonial authorities. Efforts to develop manpower for clerical and supervisory positions in government have usually been assigned to the secondary school.

Lacking qualified teachers, these countries have often had to recruit their technical and general secondary school staffs from abroad. Institutions for training secondary school teachers are fairly limited; most of the new ones have been encouraged and developed by the U. S. Cooperative Education Program.

Nepal is being helped in its development of a multipurpose secondary school system for grades 6–11. The project calls for modification of some ninety-two existing secondary schools. Each school is to be equipped with a science lab, shops, library, home economics room, classrooms, and land for practical agricultural demonstrations. This project should increase the secondary school enrollment from 14,000 to 20,000 students each year.

The Government of Nicaragua has constructed a National Vocational School under a Cooperative Education Program begun in 1951. U. S. technicians advised in selection and purchase of equipment and nearly all of its eight shops are set up and ready for operation. Teachers as well as pupils are being trained in this program.

U. S. assistance has helped Brazil train staff members of teacher-training institutions at an education center in Bele Horizonte. As of 1959, 235 teachers received instruction in modern methods, theory, and practice. An associated project is training 1,000 secondary school administrators, supervisors, teacher-educators, and teachers. A number of Brazilian specialists have received advanced training, with observation of American schools and study at the University of Southern California and other institutions.

In Liberia, major assistance at the secondary school level has been given to Booker T. Washington Institute in Kakata where vocational education courses are being

Courtesy Standard Oil Co. (N.J.)

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The non-government arm of export reaches out to Cameroun (facing pg.), Venezuela (left) and Saudi Arabia.

"Education Now," Says Young Africa

by Giles T. Brown

Dr. Brown toured Africa from Cairo to the Cape last summer, talking with a score of Africa's educational and political leaders including Tom Mboya and C. M. Mwashumbe, party leaders in Kenya, Blatta Dawit Ogbazzy, foreign affairs minister of Ethiopia, and John Nyonyi, member of the Uganda Parliament. Brown is chairman of the social science division at Orange County (Cal.) State College.

IT IS HARD to describe the current situation in Africa without appearing to judge.

When the first white man appeared in tropical Africa the native had no wheel, no coinage, no sense of private ownership. Education was merely indoctrination of the young into tribal folkways. To say that many of the colonial European governments tolerated, even encouraged, ignorance among the natives is a truism. In eighty years of Belgian colonial rule, the fourteen million Congolese yielded no native doctors, lawyers, or engineers—and only sixteen college graduates. But bottled ignorance ferments and finally explodes. We see it in the Congo today, and we saw it in the Mau Mau movement in the early 1950's.

Tom Mboya, Kenya's labor leader and secretary of its largest political party, readily admitted to me that his country does not possess enough educated men and women to conduct the normal activities of government but he was equally positive that freedom would not be delayed because of this. Elections are due in East Africa in March; Mboya's party, KANU, will likely win. Neither it nor its rival, KADU, are willing to wait for the educative process to provide the teachers, technicians, lawyers, and doctors which will be necessary to keep a government going. This might take years.

To fill the gap they hope that many Europeans will be willing to remain and help; this is the case in Ghana. The other hope is to develop a crash program by sending young Africans to schools abroad. This was the thinking behind the famed "airlift" of students from Nairobi to America this fall. But an airlift can also be organized to Moscow or Peking.

I talked with Danson Kiplagat, one of the airlift students from northern Kenya. He was full of optimism for what American education would do for him and his people. As he spoke, I wondered if our present system would be adequate for his needs. It is easier to imagine a spectacular scheme to develop a modern educational system in Africa, including a task force of consultants, teachers, administrators, and architects. It would command the attention of the world—though it would cost money and take time.

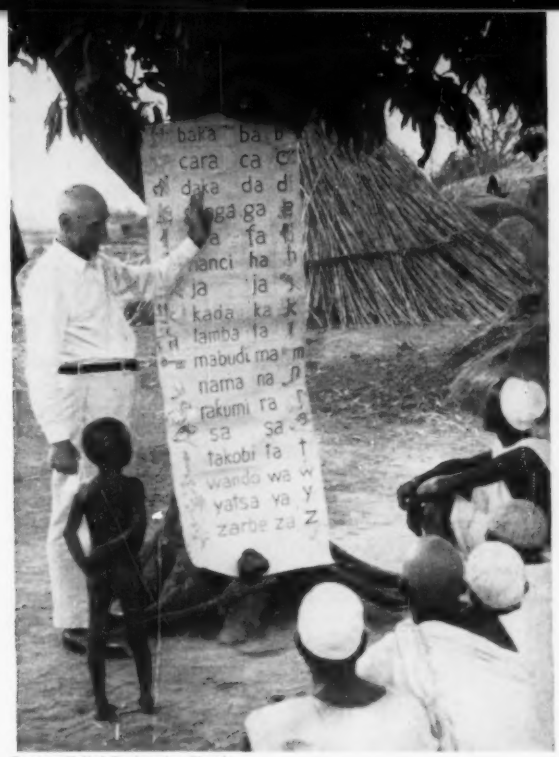
But time is running out. The young African is not willing to delay freedom merely because of the educational gap. Is America prepared to offer the right kind of help? Our standard courses and teaching methods are hardly sufficient. Language and customs have to be considered too. (When one American school catalog said that "campus life was varied, friendly, and free," an African mistakenly thought this meant no tuition costs.)

The crash program envisioned by the new African leadership must be done almost immediately. Mboya told me that he wants to integrate the civil service this year in East Africa and has called for a 50 percent representation of natives in all areas. These potential civil servants are not now trained but he feels that they can learn on the job. Ironically, one of the by-products of African independence has been the loss of teachers to government service in the new states. Three-quarters of the top government positions in some of the new nations are held by former teachers.

Africans see three levels of educational projects. First, on-the-job training based on the theory that responsibility brings knowledge; second, crash programs to educate overseas a new generation of citizens; and, third, creation of a more conventional education system in Africa itself. That this seems an upside-down way of doing things is not for us to question.

The magic word of freedom brooks no delay. We can only assist. And if we fail, there are others who are more than willing. Our democratic education system compares at a disadvantage with the centrally-operated Communist system. The Russians send a few experts to Africa to study how Russian education can best be adapted to the native. On their return to Moscow, the experts draw up recommendations which can be implemented immediately. The penetration of Red China into the African continent in the role of advisor is nothing short of alarming. Recent votes by the new African countries in the UN should be warning enough.

As of now, no student in the famed airlift is studying in a Communist country. But if our educational help is not suitable to students whose immediate forebears had no wheel or written language, they will look elsewhere. American school and college administrators must ask themselves if their institutions can provide the type of educational help that will keep Africa on the sane path of development.



Courtesy United Presbyterian Church

Dr. Frank Laubach teaches "teachers of one" in Nigeria.

developed to handle the country's trade and industry. More than 600 Liberians have been trained in masonry, auto mechanics, building construction, radio and electricity, heavy duty mechanics, vocational agriculture, and office skills.

The Government has launched a regional program in India for training vocational teachers. Four regional teacher-education institutions have been started, each with an attached experimental high school for demonstration use. Two model vocational or multipurpose high schools are being developed in each state. Ultimately 300 model high schools will be established, one for each district in the nation. Technical specialists supplied under a U. S. Government contract with Ohio State University work with Indian officials in developing their program.

Higher education. United States assistance to higher education in many of these countries is channeled through contracts with American universities whose resources are used to help foreign universities or ministries of education. This assistance includes technical specialists, equipment, and training of foreign university teachers, either in the host country or on the American university's home campus. Programs are developed to improve curriculums and teaching methods, to train new faculty, and, in some cases, to plan a new institution from scratch.

This phase of operation export involves more than 300 universities, colleges, and technical schools in forty-one countries. They are being aided in their development through eighty U. S. Government contracts with American universities.

The University of Nebraska, in cooperation with the Turkish Ministry of Education, is developing a new institution called Ataturk University in Erzurum. Assistance here includes both building the plant and training the faculty.

The University of Pennsylvania is helping Pakistan establish its Institute of Public and Business Administration at the University of Karachi. In-service training courses for the staff plus consultative and advisory services are provided.

In the Sudan, a university-to-university contract has been established between the University of Khartoum and Northwestern University. This project has helped to develop a faculty of engineering, staffed by young Sudanese graduates who have had post-graduate training at Northwestern.

Adult education. While literacy has not been a major project of U. S. technical cooperation in education, a few projects have been started. In Nepal, more than 9,000 persons have been taught how to read and write since 1956; and 13,600 more were enrolled in literacy classes in some 400 villages. By the end of Nepal's Second Five-Year Plan, 30,000 adults each year will be on their way to literacy.

A literacy project in Turkey is training tens of thousands of young men in the armed services to read and write. Army recruits spend their first seven weeks in one of seventeen literacy training centers. Teachers are regular elementary school teachers in military service as reserve officers.

International exchange. The U. S. Office of Education, in cooperation with the State Department's International Exchange Service, also arranges educational programs here for visiting educators from countries abroad. The visitors are provided grants under the U. S. Information and Education Exchange Act of 1948 (Smith-Mundt Act) supplemented in some cases by Fulbright grants. This exchange program has helped to develop mutual understanding among the people of the free nations of the world and to improve standards and techniques of teaching both at home and abroad.

Each year some 50,000 foreign students come here to study on American campuses. About 10 percent of them are here through the State Department's International Exchange Program (the remainder are self-financed or financially supported by private agencies or their governments). Like the visiting educators, these students take American educational expertise home with them.

But no one wishes to "transplant" an American system of education to these countries abroad. That is not the idea. Rather, U. S. institutions and agencies are, by invitation, upholding the American ideal of lending a helping hand where there is ignorance, poverty, disease, and distress to overcome. From Altiplano, Peru to Dakar, Senegal, Americans and their hosts are tackling "insoluble" educational problems and solving them.

The spirit that motivates these undertakings has been summed up by one United States educator in lonely, faraway Peshawar, Pakistan: "Give us a little time. Provide us a little place to stand on the sure foundation of a thoroughly democratic education and we will help the Pakistanis to move their new country into an enduring union of free nations in our time." ●

Industry's Pull on Administrative Talent

by Newton Wilson

A PROFOUND and silent educational force is at work in our society, growing out of the new climate of industry. OVERVIEW's Harold F. Clark has estimated the size of America's industrial training effort to be some four times that of the public schools. Such estimates are difficult to make because industrial training is not always set apart from the business of the parent company. It is a known fact, however, that 85 percent of the 350 largest American corporations are carrying on some kind of educational activity requiring regular attendance of its employees.

What does industry offer the educational executive? Just what does the administrator of an industrial training program do? How does an educator enter the field?

The more traditional kind of training (orientation, on-the-job, basic skills) has been operative in industry for some time, generally as a function of the personnel department. It has often provided opportunity for its administrators to move into upper management through the company's management structure: the vice-presidents of several of America's largest companies began their ascent in the training departments.

An even more promising trend has begun in companies that recognize training as an integral part of the industrial process, especially those in research and development and in the production of specialized products. Following the new "product line" management philosophy, these companies establish a separate training department as part of the organization behind each product. If the company produces computers, inertial guidance systems, fire-control systems, and the like, the vice-president in charge of the computers division will have a complete and self-sufficient organization responsible to him, insuring firm management control of all the operations involved in producing his product, and including a department ready to train customers in its use.

In companies organized along product lines, each project manager will have a complete training organization set up to meet his needs exactly. The manager will participate in the operations of the central administrative training function only for those operations common to the whole company, such as the administration of the company's educational reimbursement plan, where one exists.

Training, which too often has been a step-child of central administrative departments, has an unequaled opportunity in product-line organization. As a part of the integrated effort of an organization, a training de-

partment can win the recognition it deserves as an essential element in industrial success.

An example of product-line organization is the customer training department of Computers and Data Systems in Autonetics, a division of North American Aviation. The parent company has a distinguished history in the aircraft industry; during and after World War II it produced such airplanes as the B-25, T-6, and F-51 and later the Sabrejets and Super Sabrejet fighters. In 1955 the company diversified and set up a number of separate divisions including Atomics International, Rocketdyne (rocket engines), the Missile Division, and Autonetics. Each new division set up its own organization for training. The demands of each division varied: Atomics International, for example, builds highly complex electromechanical systems for inertial guidance of missiles and submarines, armament and flight control systems for fighting aircraft, both military and civilian computers, and data-processing systems. In 1960 Autonetics reorganized into product lines, giving the manager of each product line complete authority over all its operations.

Under Dr. N. F. Parker, vice president of the Computers and Data Systems Division, and J. M. Wright, manager of Computers Marketing, an organization was necessary to insure customers the fullest possible use of Autonetics computers and data-processing equipment. This became the responsibility of Field Engineering, under General Jack Wood. Field Engineering Training is the function of the Customer Training Department.

Administration of the department, which numbers more than ninety professionals, involves selection and direction of professional counselors, facilities managers, publications planners, and course instructors. Running the training activity of this company involves managerial skills of a high order.

Most customer training instructors are engineers and specialists, of course, because Autonetics is engaged in such specialized fields. Some are former high school teachers, and several were college instructors. Several have advanced degrees in educational administration.

Lorie O. Watts, supervisor of Customer Training, is one of those with advanced training in educational administration. He taught chemistry following college graduation and became an instructor in radio engineering in the AAF during World War II. After the war he became a technical advisor and instructor in electronics, and later served as supervisor of the Nonresidence Training Branch at Scott Air Force Base, Illinois, in charge of preparing correspondence courses and training manuals for the Air Training Command. Watts came to Autonetics in 1956, as supervisor of Training Services and administrator of the Educational Reimbursement Plan. During his training career, Watts earned an MS from the University of Illinois and completed nearly all of his PHD work at Washington University.

There are, not surprisingly, several Phi Delta Kappans in Watts' department. One of these is C. L. Kaufman, a former instructor in high schools and at Chicago Technical College. Kaufman earned his BS in physics from the Illinois Institute of Technology and MA in educational administration at the University of Chicago—ideal combination for an industrial training administrator. After several years in business management and a year as a radiological monitor for the City of Chicago, he became an engineer-instructor on radar systems for the Hughes Aircraft Company. He is now a senior training representative on Autonetics' Verdan Computer.

Another senior training representative, John Collins, taught mathematics at St. Ambrose College and St. Louis University. As an instructor on General Electrics' heavy ground radar, he was assigned by the Military Assistance Group (France) to duty in Germany with the French Air Force. After his return he worked on Atlas Missile Guidance for several years before his appointment as a senior training representative in charge of instruction on the Fadac Computer. He is responsible for the instructional plans and activities of the group in which he works. According to the job specification, he:

> . . . determines the training needs of customers and suppliers, forecasting the need for subjects, courses, and personnel to be taught. Also, he determines the skill levels, facilities, equipment, training aids, budgets, and reports necessary, and prepares proposals, assists in the negotiation of contracts with customers and supplies, and administers training programs.

DEMAND FOR qualified administrators in industrial training is growing, and may swell to unexpected proportions. Membership in the American Society of Training Directors, a steadily growing professional group, already numbers close to 4,000, and this is by no means the total number of educators in industry.

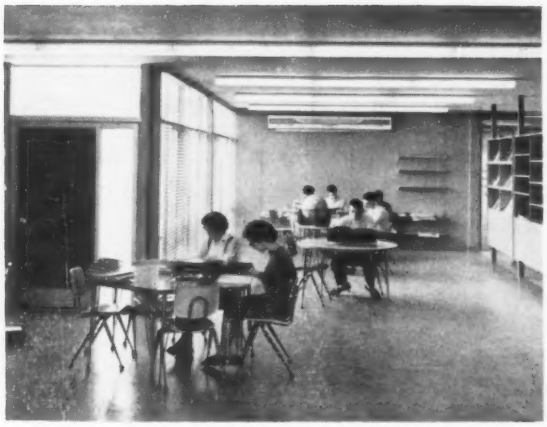
As American industry shifts from manufacture of relatively simple products to research and development and to the extremely complex new things resulting from our new technology, training will not be something that a company *may* do, but what any competitive company *must* do. International Business Machines, for example, administers a staff of 1,000 full-time instructors. Linde Company, division of Union Carbide, staffs thirty full-time and fifteen part-time trainers for its 10,000 employees. U. S. Rubber employs a training director for each plant in its eight manufacturing and sales divisions, and each division, in turn, is administered by a director.

Industrial training administrators are now coming from varied backgrounds, but the requirements are generally common. The training executive must have a sound educational background, considerable experience in training in industry, and the ability to work well in an industrial organization. He can command a salary in the range of $8,000 to $12,000 and more. Increasingly, graduate work in educational administration is required.

Are schools of administration rising to the task of preparing industrial training administrators? Are able educators qualifying themselves for executive positions in industry in the numbers required? The rewards are considerable, the opportunities many, and the prospect for able executives is very, very bright. ●

A respondent to industry's pull, Mr. Wilson is with the customer training department of Computers and Data Systems of Autonetics, in Downey, California.

BIG SCHOOL ON THE SEAWAY



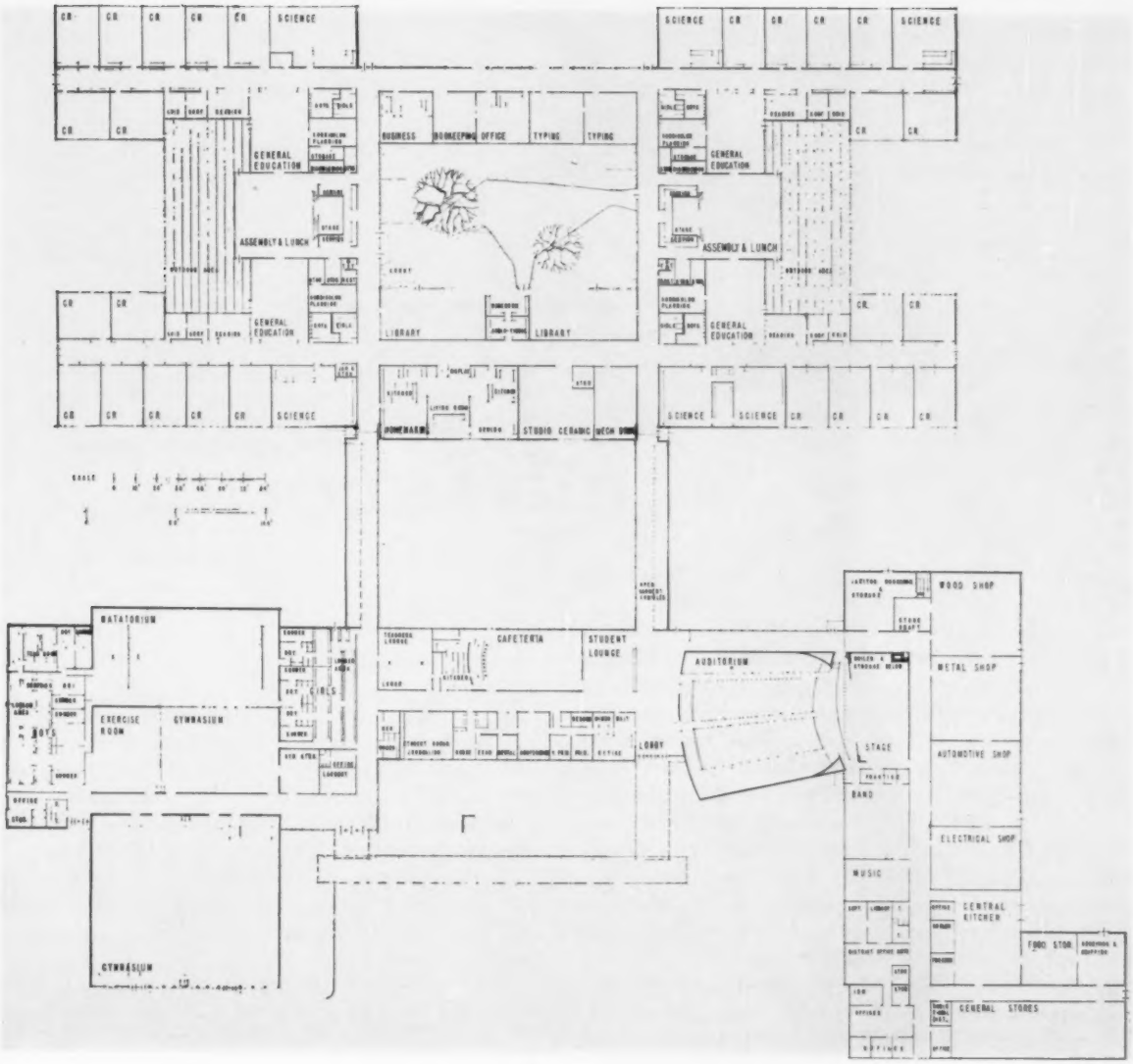
Each of Massena High's sub-schools has an education lab used as commons, workshop, and planning center.

THE OPENING of the St. Lawrence Seaway and a hydro-electric power project on the river changed Massena, New York, from a north country village to a thriving industrial town. As the first ships sailed down the Seaway in 1959 the town began to hum with new construction. Alcoa Aluminum, Reynolds Metal, a Chevrolet engine block foundry, and expanded public utilities now share electric power from the Seaway dam. The town's population has nearly doubled.

Foreseeing serious problems for their children, the people of Massena passed a $9½ million bond issue to build a high school and four elementary schools. Largest project was the junior-senior high school for grades 7–12, a $4 million complex designed by Sargent-Webster-Crenshaw & Folley and opened last year.

Despite its size (built to accommodate 1,440 students) the school is as intimately proportioned as the village's former schools had been. The trick was sub-division of the plant into four little schools (see floor plan).

With enrollment now at 1,225, each subschool has a student body of just over 300 and a faculty of fifteen teachers, including a resource coordinator and guidance counselor. By subdividing the enrollment, the designers deflated two pressures that ordinarily impede teaching effectiveness: too many students and too many class periods. Flexible schedules within the little schools permit variation of normal 40- to 50-minute periods. Core of each sub-school is a general education laboratory which serves as commons, workroom, and individual or group project center.

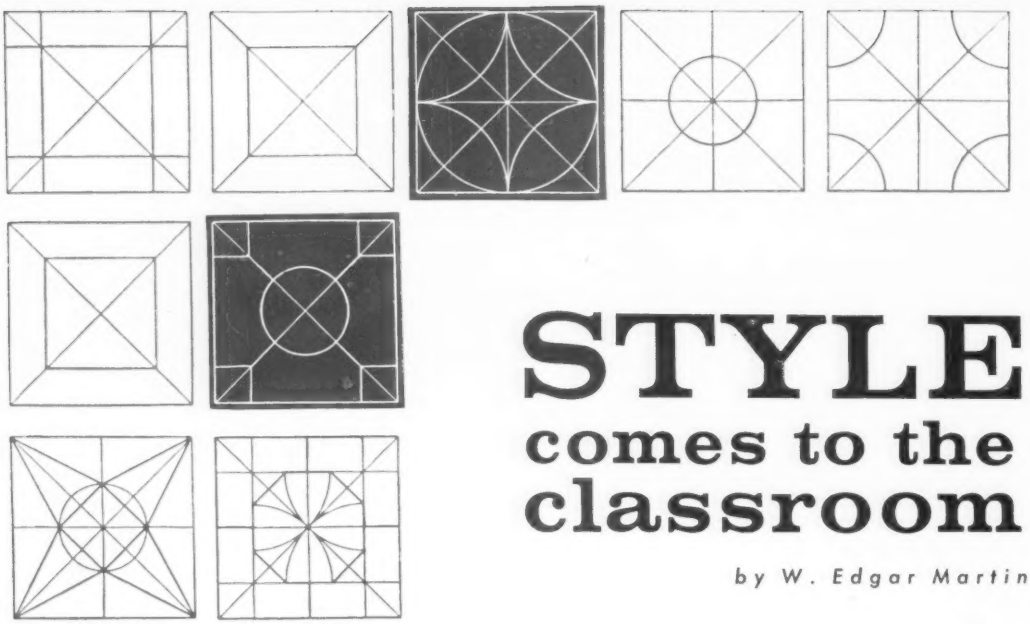


*Top half of plan shows layout of four little schools. **Reception area** (right) is staffed by student volunteers.*

Molitor photos

Special facilities—homemaking, art, music, shop, business, physical education, auditorium—are housed in separate wings and shared by all the students. A central kitchen staff prepares meals for the high school's three cafeterias and for the eight cafeterias in the district's elementary schools.

A difficult foundation problem—marine clay that remains wet and loose underground—required that the entire one-story school, including a 23-stall bus garage and boiler room, be built above ground. Concrete piling was driven into the site to overcome this squashy condition. The building is framed with steel and finished with masonry and porcelain enamel aluminum panels set in an aluminum grid wall system; aluminum was the logical choice because much of it is produced in Massena. ●



STYLE comes to the classroom

by W. Edgar Martin

PACE-SETTING designs and fast-changing styles in furniture and equipment confront educational purchasers with almost an embarrassment of riches. Each year old lines are improved and new lines are developed to meet the requirements of inventive teaching methods and curriculum expansion. Behind these advances in styling and materials are two forces: the vitality of established companies in their research and development progress, and the entrance into the field of firms with fresh approaches to design engineering, manufacturing, and distributing.

It is exciting to tour a modern school or college and find students using furniture and equipment that did not exist five years ago. It is challenging, also, to visit exhibitions of school furniture and equipment and see old and new items of all leading manufacturers of the country displayed side by side. These displays aptly demonstrate that the competitive school furniture and equipment industry is keeping up with developments in teaching, curriculum, and plant planning, and that the industry possesses built-in flexibility and freedom—a kind of insurance against design stagnation. There is ample evidence of the industry's know-how meeting the needs of education, when such needs are recognized and clearly defined by educators.

Many of our larger manufacturers have set up research and development departments to work continuously on the problem. These departments explore educational trends to develop and test new items, new fabrications, new finishes, and better methods of distribution and service to the educational system. Most companies have professional educators on their staffs who work closely with instructors and administrators to study how furniture and equipment are used in school situations. They also work with business officials to help them select and purchase the right items for their programs and pupils. These company representatives are always open to suggestions from educators on design changes or on research that needs undertaking.

Mass production in design, engineering, manufacturing, selling, distributing, and servicing school furniture and equipment has made it possible to incorporate more expensive—but lighter, more durable—metals, alloys, and plastics in new products. Yet, they are kept competitive with products made of more traditional materials.

All this means an improved environment for teaching and learning. It means a greater variety of furniture and an increasing amount of horizontal and vertical working surfaces and spaces.

Many of today's educational furnishings are light, strong, durable, mobile, flexible, stackable, modular, and adjustable. They have maximum storage space and leg room, optimum working surfaces, colors and finishes keyed to lighting factors and low maintenance. Their dimensions are sized to conform to today's average school or college student.

The trend to single-pupil chairs and single- or double-pupil tables has by now become established in elementary and secondary schools. The fixed combination desk (complete with cast iron pedestal, dark brown finish, and inkwell) has almost disappeared.

Chairs and tables designed to stack or nest permit teachers to clear large work areas in classrooms. However, they have been reluctant to utilize this feature, possibly because some teaching and learning procedures do not require such flexibility, or because they don't know their furniture has this feature.

Table and desk tops now come in any number of sizes and shapes—rectangular, trapezoidal, semi-circular, round. Tables can be grouped together to provide large working surfaces at the same height, or can be arranged into hollow squares, semi-circles, or serpentines. Tablet-arm chairs and chair-desks are designed for left-handed

pupils (who make up about 11 percent of our school population).

Considerable research has been done on the physical measurements of children. Manufacturers are designing according to these new data. Some have developed and introduced complete lines of classroom seating which are adjustable in increments of one inch. Others have added sizes within their lines to accomplish the same purpose. Manufacturers understand that educators try to provide three or four different seating sizes in each classroom so that each pupil will be in a seat or at a desk of the proper height.

During the past five years there has been considerable experimentation by designers and manufacturers to find the most efficient storage for books and materials. This has led to the elimination of the book box from under the desk top and the deep apron and drawer from under the table top. Storage is now available in several different positions on the table or desk or in a wire basket underneath or at the side of the chair.

New types of modular cabinets, book carts, storage files, and movable demonstration tables and stands are now available. Some provide work space and storage for related materials; others have general storage or display space, with work area as the added feature. Some cabinets come with sinks and drinking fountains, others with gas or electric hot-plates. Many are adjustable in height and are movable—with oversize locking casters they can be rolled anywhere and then locked into place as a stable work surface. Others have pegboard or tackboard backs for child-height display surfaces.

Movable demonstration tables for elementary science are particularly ingenious. They have acid-resistant tops, cup sinks, self-contained water and gas supplies, electric outlets, and a cord for 110-volt AC power. Special attachments are available for teacher demonstrations and pupil experiments. One recently developed model also has a dual position projector for both overhead and standard projection of transparencies, notes, maps, sketches, examinations, apparatus, or live demonstrations.

Bookcases, coat racks, and display boards are now designed as movable room dividers. Side alcoves—for reading, small group discussions, and for potentially disturbing manipulative and construction activities—can be formed with these dividers. Sturdy work benches come equipped with child-sized tools—including vises—for working with wood and metal.

OVER THE past couple of years an interesting approach to vertical wall space has developed. Chalkboards are made in various materials and no longer need be permanently fixed to walls. They are adjustable in height so that the same room can be used by primary and upper-grade students with chalking surfaces at just the right level. Porcelain-on-steel boards encourage the use of magnetic teaching aids. Supplementary high-lighting systems are available for all types of boards, also.

Mr. Martin is school furniture and equipment specialist with the U. S. Office of Education.

Tackboard strips above chalkboards, no longer the fashion, have given way to movable panels or large tackboard areas that extend to the floor. Tackboard panels come in many colors and textures to match virtually any decor. Pegboard panels are also incorporated into display areas; most local hardware stores now carry a complete line of hooks, hangers, and shelves.

ANOTHER, more dramatic, development points toward obsolescence of most wall-attached fixtures (including chalkboards) and to unlimited classroom flexibility. An integrated system of work-storage-display units has been engineered which consists essentially of slotted aluminum standards fixed permanently to walls on four-foot centers. Removable, interchangeable, accessory teaching units are fastened to the standards. Accessory units include regular or porcelain-on-steel chalkboards, tackboard, pegboard, easelboard, flannelboard, shelves, cabinet storage and display units, magazine rack storage and display units, and a utility rail for hanging maps, charts, and projection screens. Additional units are being planned as the need for them becomes apparent. Each accessory unit is designed on the four-foot module and has angle clips to fit the slots. Kinds and heights of all units can be adjusted to fit the learning situation or to transform a room function.

In science laboratories the fixed service lines and fixed demonstration and pupil work tables has always hampered teachers. Not until 1954 was the idea of the perimeter-planned science laboratory recognized. Today, many leading manufacturers of science laboratory furniture have a line of this more flexible furniture; many new schools use it exclusively. Of course, each line has special features of its own, such as interchangeable storage units and equipment display boards. In addition, storage cabinets, tote trays, and mobile laboratory carts ease transfer of equipment from storage rooms to laboratories.

New development in science furniture is the acid-resistant work-table top available in colors other than traditional black. Science laboratories can now be planned to suit the same principles of lighting, reflection, and color which apply to all other areas.

Since the industrial revolution intermittent and varyingly successful attempts have been made to adapt and introduce "promising" techniques and devices of business and industry into our schools. At present we are experiencing the introduction of automated equipment into our educational institutions: closed-circuit television, learning laboratories, teaching machines, and data-processors. Each of them comes with its own special items of furniture, equipment, and instructional devices.

Automation in teaching and learning poses a sharp challenge for educators: building areas must be planned to accommodate these new devices and teachers must know how to make full use of them. Designers and manufacturers face an equal challenge in up-dating existing items, designing new ones, or developing integrated teaching-learning systems. Fortunately, past success in furniture and equipment design bodes well for the future of American education. ●

Modular Furniture for Model Schools

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From U. S. Steel comes a new formula in educational furniture: Start with basic structural principles; reduce to modular components; hang with utility elements; and multiply as needed. Result is a modular, minimum-inventory system of educational furnishings. Here are five examples in prototype.

In September, the United States Steel Corporation called a press conference for furniture and equipment producers. The company wanted to show the trade some new approaches to steel as a design material—to "unlock steel's personality," as they put it, "and present it as a dynamic design material."

In a stunning slide presentation, the viewers learned some facts about steel construction: that the principles of tension, compression, and cantilever action are the same, whether the structure is a bicycle wheel, Ferris wheel, crane, suspension bridge, or umbrella. These principles were then shown in application to office furniture in designs developed for U. S. Steel by Peter Muller-Munk and Associates. The structural principles—tension, compression, and cantilever—were reduced to modular components.

Overview saw the possibilities of these modular components in educational furniture and requested U. S. Steel to sketch out some new ideas. The results are shown on these four pages—possible prototypes of tomorrow's school furniture, as developed by the Muller-Munk design staff.

Starting point is a package of basic parts or components which can be assembled to form a variety of items: desks, work units, tables, multiple seating, dividers, screens, and storage units. Since frames support the total weight, they are the modular basis of assembly. The frames (basic support units) are what the designers call

a "C" leg (see sketch A) or a "V" leg (see sketch D), which can be used to support a variety of loads. The leg, "C" or "V", combines tension, compression, and cantilever action. It gets its strength from steel members welded together while under tension, or stress. This simple expedient gives it a life of its own and a strength far greater than could be realized by simply bending a bar into a "C" or "V" shape. To match this strength with steel or any other metal simply by depending on bulk would require a massive structure of Victorian proportions.

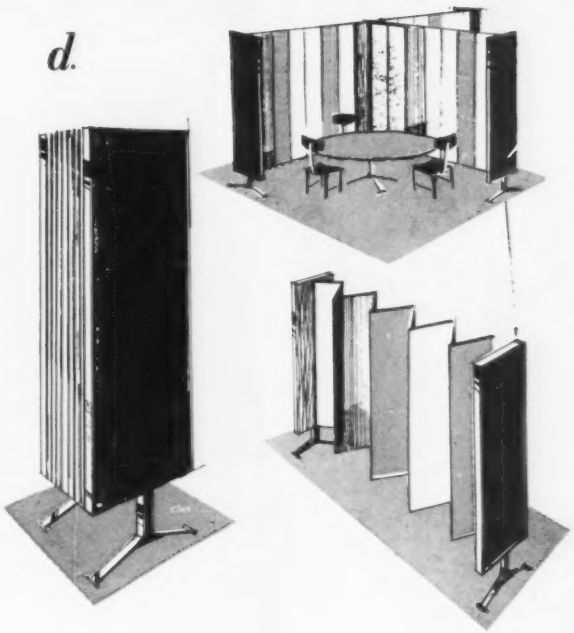
The supporting members are then arranged in combination and hung with panels, shelving, seating, or whatever, to become furniture. Frames can be stainless steel in a brushed or blasted finish, or carbon steel with an organic coating in color. The added elements can be developed from vinyl-coated sheet steel, *matte* porcelain sheet metal, impregnated plywood, fiberglas, or plastic laminates.

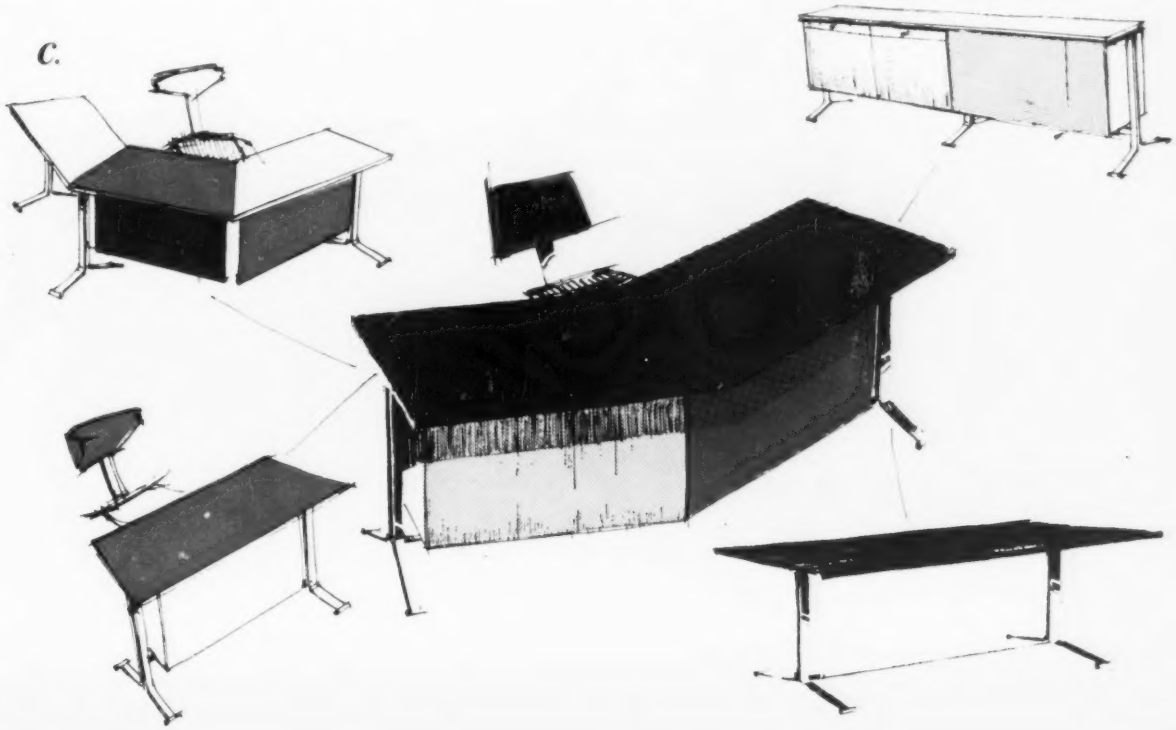
Working from these modular bases, the designers developed five examples or prototypes: desk-seat unit, seating unit, storage case unit, folding partition, and play-storage unit.

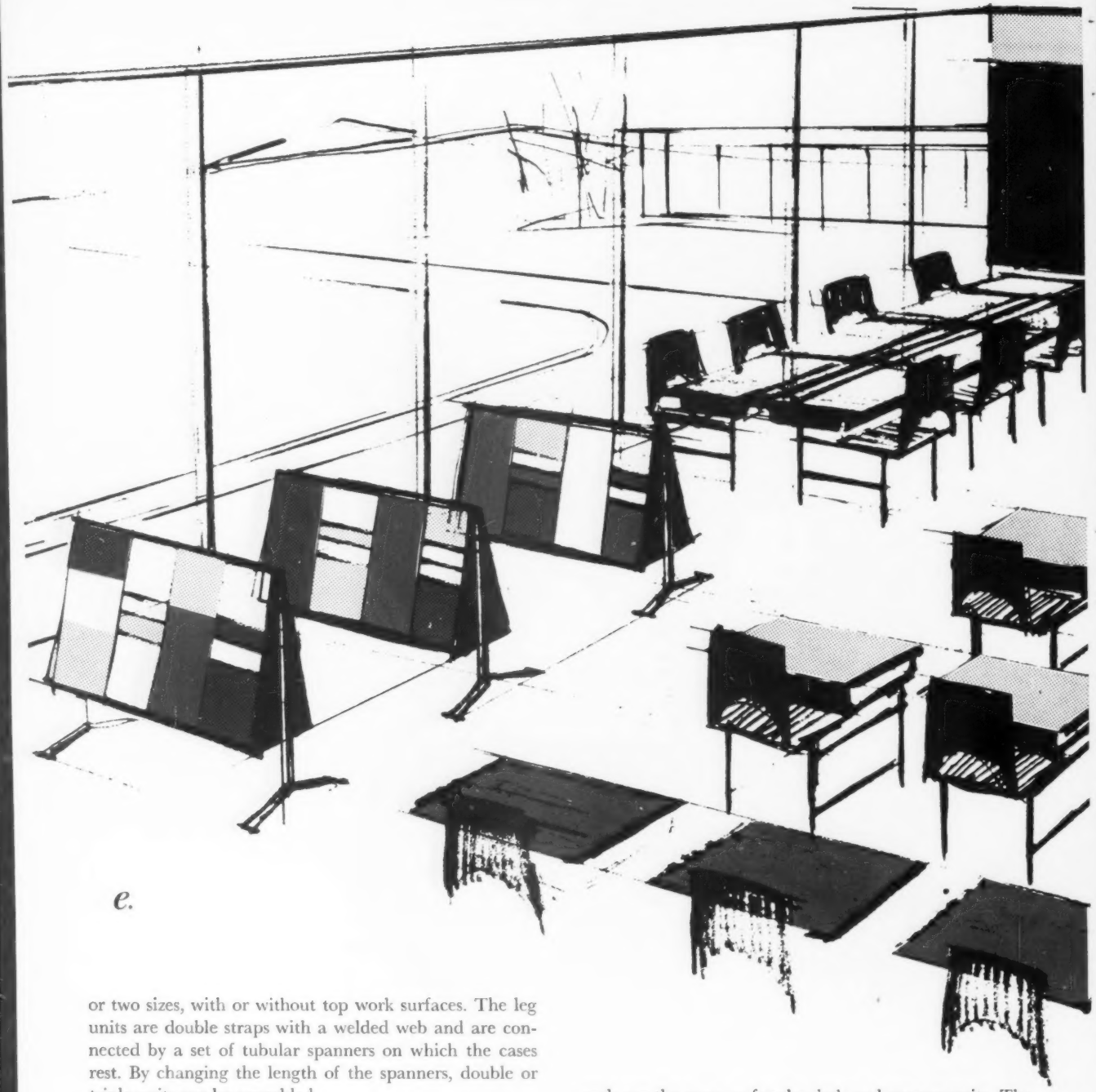
Sketch A is a basic attached desk-and-seat unit which can be assembled with either right or left entry from the same parts. (They can be placed in front-to-back double rows to conserve aisle or floor space.) The designer has used Weight-Strength Rates of the tubular frame in an equation which combines lightness with strength.

Sketch B is a seating unit for lecture use or classrooms where the student is transient and requires only temporary personal storage space. The frame is tubular stock rolled as a special supportive section. Two side frames, one higher than the other, are connected by lateral stretchers. The seat, seat back, and writing arm are then added. The arm can be pivoted out of the way when not needed.

Sketch C shows storage case units. These have optional drawers and inner storage facilities for books, phonograph records, supplies, work materials, files, musical instruments, etc. The basic case could be furnished in one







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or two sizes, with or without top work surfaces. The leg units are double straps with a welded web and are connected by a set of tubular spanners on which the cases rest. By changing the length of the spanners, double or triple units can be assembled.

Sketch D shows folding partitions which can be extended to divide areas for separate activities. A simple dolly provides mobility; a top clamping system locks the panels into place, making these suitable for semi-permanent dividers. The end support is a taller version of the storage-cabinet leg unit.

Sketch E shows what a classroom outfitted with these pieces of furniture might look like—in effect, a model modular schoolroom.

Note the triangular items at the left. These are kindergarten or elementary grade play-storage units. The frame ends are the same as for the desk and storage units. The storage unit, as a stand-up desk, opens to shelves for drawing paper, pencils, finger paints, etc.; when closed, it becomes a large easel.

The items shown here are not on the market, and exact copies of these pieces will perhaps never appear. Rather, they represent initial exploration and concept. Further development and engineering resolution would be necessary in any case before these suggestions could be considered as final proposals. They are presented here to point out the practicality of a modular, minimum-inventory system of educational furnishings. ●

MAINTENANCE

Keep Your Food Service Germ-Free

FOR MOST parts of the educational plant, good maintenance practices spell economy. In kitchen and cafeteria they spell something else, too: health.

Steamy kitchens and crowded dining rooms are the natural breeding places of bacteria. Faculty members, students, administrative staff—and, most embarrassing, even visitors—can contract colds, influenza, throat infections, and other winter ailments because someone in the kitchen let his maintenance standards slip.

Unfortunately, in many educational plants the food service area is still the orphan of the custodial service. Maintenance responsibilities are divided between custodial and cafeteria staffs. Result is a less than thorough maintenance program in a key school or college facility.

Spot checks show that in about seven out of ten cases the lunchroom staff is responsible for cleaning heavy kitchen equipment (range hoods, refrigerators, ovens). But the trend is toward incorporating kitchen and cafeteria maintenance into regular custodial schedules. In this case, the custodial staff is paid from school funds instead of the food service budget.

Manhattan College (Plextone Corp.)

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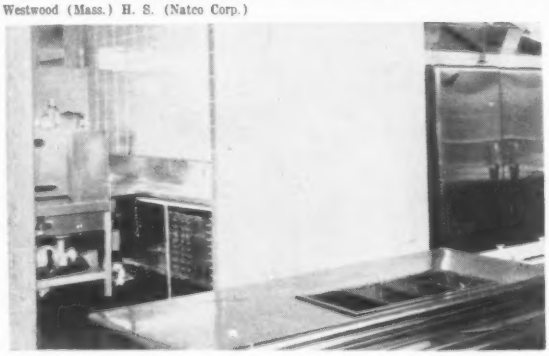

Special paint on cinder block (top) and glazed tile (below) are ways of treating walls for sanitary kitchen care.

Building materials used on floors and surfaces of food service areas figure in maintenance problems, although there is no unanimity among experts on just which materials are best. On floor covering, for example, there is the resilient/non-resilient polemic.

Prof. Robert Darlington of the Washington State Institute of Technology, says about resilient floors: "In kitchens and related areas, grease-proof asphalt tile is recommended, and in some cases is used with excellent results without waxing. Immediate cleaning of spilled foods and grease plus daily brushing keep it in good shape."

Darlington also finds linoleum good because it lacks joints and is highly grease-resistant, as are vinyl asbestos and vinyl tile. However, most resilient floor materials (asphalt tile, vinyl, rubber, linoleum, cork, and wood) cannot be cleaned with abrasive or acid cleaners or solvent emulsions. They should usually be kept waxed, but this makes the surface slippery when wet.

Non-resilient flooring (terrazzo, ceramic tile, red quarry tile, concrete) can take virtually all kinds of cleaning agents and requires only routine care. Lack of resilience, however, can be hard on kitchen personnel who are on their feet most of the time.

Whatever the material, kitchen and dining area floors should be swept and scrubbed daily—though not, of course, when food is being prepared or served.

Kitchen walls should be covered with a highly impervious, non-absorbent finish. Ceramic glaze finish is permanent and can be kept clean by ordinary soap-and-water washes. Concrete or cement block should be covered with a moisture-resistant paint and requires frequent scrubbing with a stiff brush.

In their new book *School Food Centers* (Ronald Press), N. L. George and Ruth D. Heckler outline a maintenance schedule for kitchen and dining room surfaces:

- Wash tables with soap and hot water after the floor has been swept following each meal.
- Wash tables each day before lunch, especially if they're used for purposes other than eating.
- Wash kitchen tables (including metal supports and shelves) daily with hot water and cleanser, then rinse and dry.
- Paint metal supports and shelves once a year.
- Scrub sinks daily with a stiff brush, hot water, and soap; then rinse and dry.
- Wash exposed sink pipes frequently.
- Scrub refrigerator equipment, shelves, trays, freezing units, and outside surfaces weekly with warm water and soap or detergent.

A major factor in making food service more efficient is the arrangement and maintenance of dishwashing equipment. Dishwashing machines are advisable when a

dining facility serves more than 150 lunches a day. (Some authorities put the figure as low as 100.) Whether or not a machine is used, certain space arrangements can improve efficiency. Clarence W. Schroeder, chief food service engineer of Hotpoint's commercial equipment department, suggests a pre-rinse sink about two feet square, built into the soiled-dish table. It should have two removable, perforated trays, for disposing of waste, and a hose with a spray attachment. He also recommends more table space for soiled dishes than for clean dishes; a 60:40 ratio is considered ideal.

When machines aren't available, a rinsing spray and three-vat sink will do the job of pre-rinsing, washing, rinsing, and sterilizing. If there are several machines, one should be set aside for glassware; with one machine, glasses should be washed first. Washing machines should be emptied and flushed after each use to prevent accumulation of grease.

After it has been scrubbed, equipment should, when possible, be left open and even dismantled to dry. Fresh, clean air—and plenty of it—is still the best maintenance "tool" any food service manager could want.

The kitchen may have two types of garbage disposal machines. One type has receiving units in the various work centers, eliminating the need for garbage cans. A second type, with a large capacity, may be installed near the kitchen or in an enclosed area at the receiving platform level, so that garbage can be dumped into it easily.

Where garbage cans are used, minimal sanitation demands a fly-proof enclosure adjacent to the receiving platform for holding garbage. It should have a cement floor with drain, and hot and cold water connections.

To repeat: The key reason behind this heavy custodial and maintenance schedule in kitchen and dining areas is to cut down the possibilities of infection and illness among the school or college community served by the feeding operation. If maintenance-for-health is rigorously followed, then maintenance-for-economy will just naturally follow. ●

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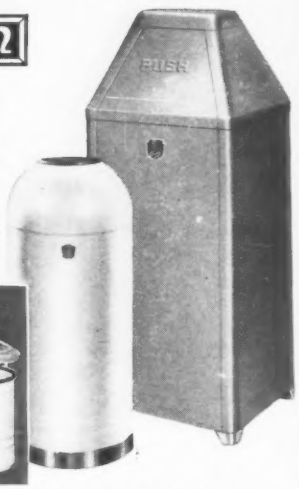

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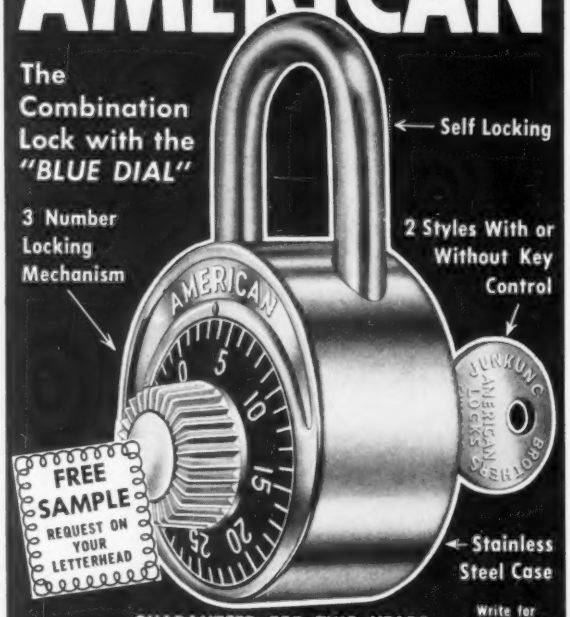

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Thingsmanship: The Art of Marshalling Your Resources

THERE IS A point of growth when an educational system finds it expedient to center all its instructional materials and put a coordinator in charge of their use. This coordinator is, in effect, a consultant in the theory, potential, and application of all mass communications media that are part of the teaching process. Not a light role, admittedly, but one that is gaining currency in education today.

Libraries and the audio-visual centers now deal primarily with materials of mass communication. Consolidation of these two service departments could bring about a coordination of educational media often wished for but seldom realized.

Formation of an instructional materials center may involve no more than an organizational change which assigns audio-visual functions to the library, since all educational institutions have libraries but not all of them have audio-visual centers or specialists. Where library and audio-visual center both exist, consolidation would be in order, and the audio-visual director and the librarian become the logical candidates for the new position of coordinator.

To determine the role of the coordinator of instructional materials, let's compare the library and the audio-visual center.

The communications media handled by the library—books, magazines, pamphlets, etc.—are used for individual instruction by teacher and student. Audio-visual materials (pictures, charts, models, slides, filmstrips, motion pictures, and recordings) serve the teacher in instructing many students simultaneously and thus are true media of mass communication. Like library materials, these are for the most part produced by outside sources. However, when the need arises they can be produced by the audio-visual center.

Qualifications of the coordinator of instructional materials are now apparent. He must be expert at educational communication and be able to instruct other teachers, design and produce audio-visual materials, and operate the equipment. Furthermore, he must be an adept administrator, able to develop and allocate his budget among the various media and strong enough to withstand Parkinson's Law (to which supporting or staff organizations are particularly susceptible).

It is an old business truism that no matter how good the product is, it still has to be marketed. Therefore, the coordinator of instructional materials must be something of a salesman. From his overview of the instructional materials field he can see possibilities for trying new techniques or media in teaching situations. But in order to convince potential users, part of his selling job will be to combat a natural resistance to change.

Perhaps more important than selling the teacher on new ideas is the coordinator's job of convincing school boards or committees of the soundness of untried techniques. With every innovation he risks being classed as a frill-monger and blamed for the rising costs of education. Here again, with his view of the total situation he can supply valid data by which public criticism may be rebutted and fevered brows soothed. This aspect of his job takes on special importance where operating costs are met from the public purse.

The role of the coordinator of instructional materials will vary according to the size and type of the system in which he works. In colleges or large public schools, for example, a supporting staff in instructional materials will usually be available to draw upon for help on reference, acquisitions, graphic arts, bibliography, photography, etc. In this situation, the coordinator's job could be almost entirely administrative. However, in small systems the tasks may be all his to perform. •

By George W. Gibson, director, division of audio-visual education, Harvard University Graduate School of Business Administration.

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COMMUNICATIONS CLINIC

Consolidation and The 8-mill Levy

LESS THAN twenty-four months after Ohio's Elmwood Local School District was formed by a four-district consolidation, a new million dollar high school building was ready for classes. How was this possible? By a well-informed public that saw the need for good schools and was willing to pay for them.

The move to consolidation began in 1955 when Bloomdale, Cygnet, and Portage Locals in Wood County met to discuss its advantages. These districts were soon joined by the Montgomery Board and together they agreed to ask the School Plant Division of Ohio State University to make a survey of the districts.

When the university survey was published, each board of education held a series of public meetings to explain it and to get a straw vote reaction. In each case a large majority voted to enter the consolidation. As there was no way by which the proposed consolidation could be placed on the ballot for a vote, the four boards requested the County Board to consolidate them and this became effective in 1957.

The superintendent then recommended the formation of a citizens committee, members to be appointed from each of the former districts, to help the board promote the program for Elmwood school district. The interest generated by the committee paid off at the polls: a bond issue of $1.1 million (5 mills on the valuation) was passed in May, 1958, only seven months after the consolidation. An additional levy of 3 mills was passed in November boosting the school tax rate to 24.7—a tax increase of over 33 percent in one year.

The citizens committee worked with the board, teachers, and the administration (and even polled former students) to help set up the curriculum for the new high school. Their recommendations were incorporated into the architect's plans and approved by the board.

The new high school, dedicated last spring, is built on a semi-campus plan. Its student capacity is 600.

The former high schools, which ranged in size from forty-five to 125 students in the upper four grades, had offered from twenty to forty subjects, some on an alternate-year basis. Now the 350 students can pick from over sixty areas during the four years in high school.

The board has also been able to start several new areas of instruction: slow learners class; art in both the high school and elementary schools; industrial arts and home economics on the junior high level; adult education in speech, sewing, shorthand, bookkeeping, and typing; elementary music instruction; and a full-time guidance director. ●

By M. E. Acocks, superintendent, Elmwood Local School District, Bloomdale, Ohio.

By any other name . . .

THE NATIONAL Association of Secondary Principals suggests that words are important on building plans being shown the public by school officials. For instance "Teachers Workroom" is better than "Lounge." "Physical Training Room" goes better than "Game Room," and "Dining Room" sounds better than "Cafeteria."

Of course this changes nothing —but as a columnist says "Often we act, not upon real facts, but on the basis of the pictures in our heads."

(Facetiously, we might change the name of the ball field to "Pedate Spheroid Enclosure," and football-doubters wouldn't suspicion a thing.)—*Reprinted from the "West Virginia School Journal."*

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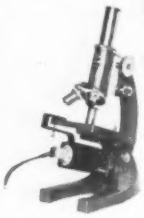

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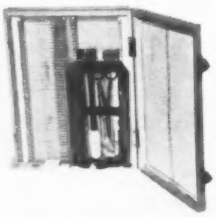

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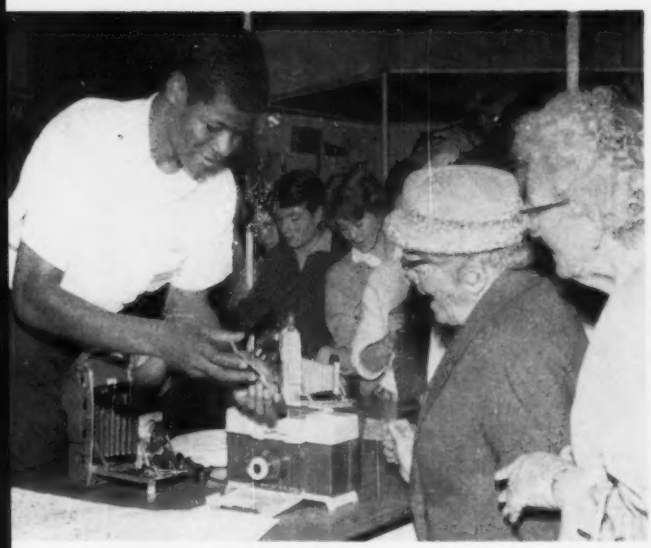
Ambassadors of The American Idea

ON SEPTEMBER 10, opening day of the German Industries Fair, twenty-seven American students filed into the U. S. pavilion in West Berlin to represent their country at the 11th annual international exhibition. Their mission: to show East and West Germans how teenagers live, work, play, and learn in the U. S. The displays were set up in America's exhibition hall, Marshall House, where nearly half a million visitors watched the students demonstrate their hot-rods, agricultural equipment, paintings, photography, and the prize attractions: electronic devices the students had built themselves. Commented Berlin's *Die Welt:* "In the Marshall House a window to America opens. It is amazing what the 27 students accomplish." ●

Mayor Brandt presents replica of West Berlin's Freedom Bell to Polly Fritz, student from New Kensington, Pa.

Pressebild Schubert photos



Harvey, Ill. senior, Wayne Tellis, catches the interest of German ladies with his photo equipment demonstration.

David Wilson (arms folded) from Athens, Ala., explains to officials his prize-winning exhibit, "Survival on Mars." Below: teenage ambassadors pose at Brandenburg Gate.

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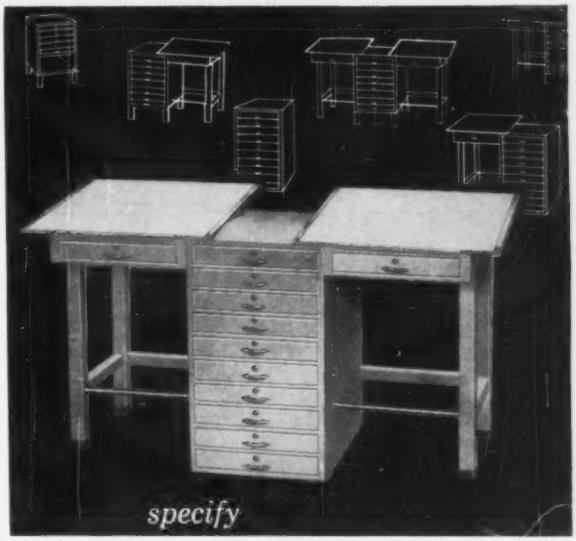

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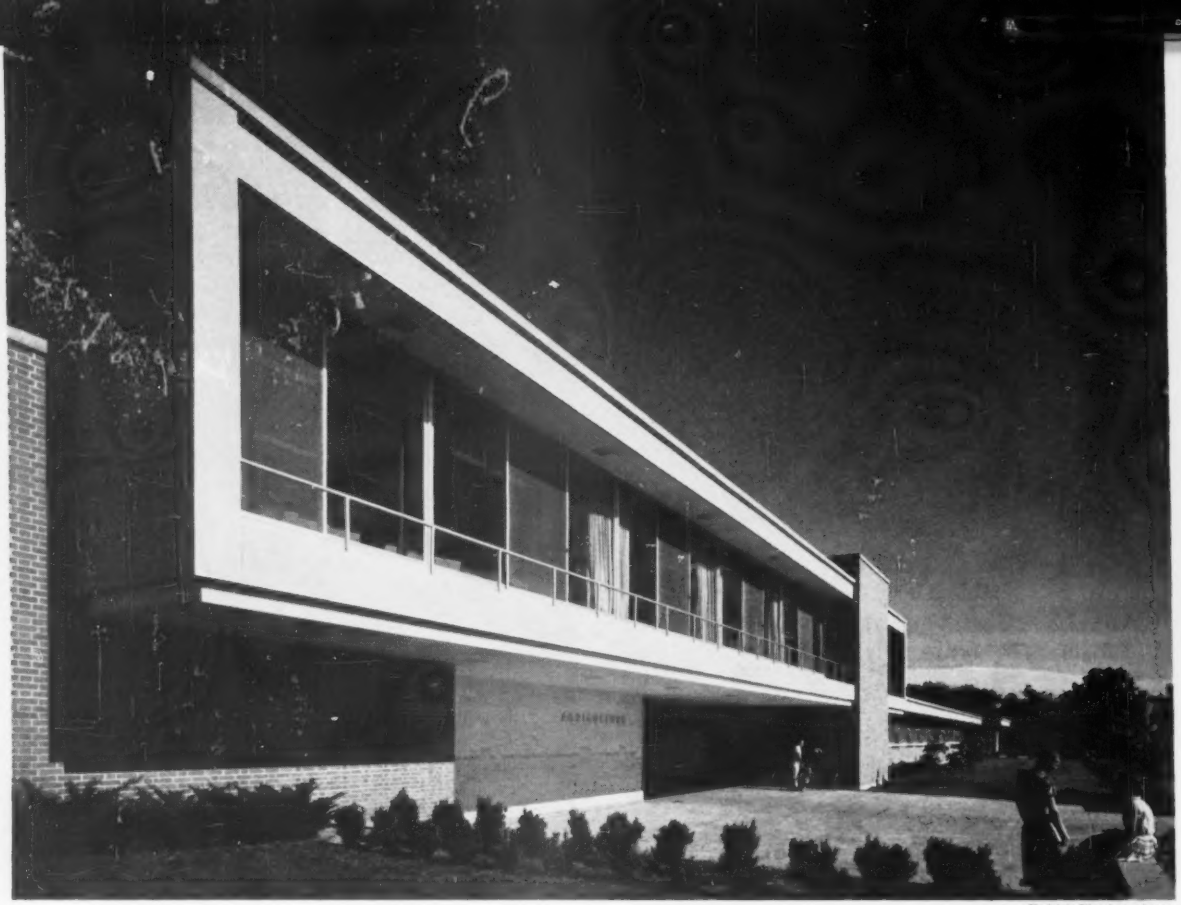

Hedrich-Blessing photos

PLANT NEWS

Bovines Backstage

A unique feature of the new agriculture building at Southern Illinois University, Carbondale, is its combination auditorium-exhibition hall. The hall is divided by mechanical Coil-Wall doors fitted into the proscenium; on one side is permanent seating for 250 persons, on the other side is a ground-level concrete floor for exhibition and demonstration of livestock (see photo at right), farm products, and farm machinery. Temporary seating for 330 can be set up in the exhibition side. This portion of the building is air conditioned.

The ag building was built with a state appropriation of $2.6 million which included construction, equipment, and site development. It contains twenty-six classrooms, nine student agriculture labs, fully-equipped research labs for staff and advanced students, two conference seminar rooms, offices for faculty and for personnel of cooperating agencies like the U. S. Forest Service research center, and the hall mentioned above. A courtyard formed by two wings contains three greenhouses.

Designed by Perkins and Will of Chicago and university architect Charles Pulley, the building has been sized to the projected enrollment for 1970. It also contains facilities that enable the University to conduct applied agriculture non-credit courses of several weeks' duration and to serve the area as a center for farm organization meetings and workshops. It also provides laboratory facilities for area-adapted research by the school and cooperating agencies. The university aims to help local small-farm owners, plagued by poor terrain, learn how to make more of their farming operations and insure a measure of economic well-being in the community.

Ward C. Morgan Studio

Scaled to Children

From the moment a child approaches the new Northglade Elementary School in Kalamazoo, Michigan, he sees a building that is as inviting and intimately sized as a teddy bear. Architects Perkins and Will and Trend Associates planned the school to a low scale to suit the size and sensibilities of its inhabitants—kindergarteners through sixth-graders.

Eaves are low at the windows and the entire facade is crisply colorful; bricks set off white and blue panels accented by vertical yellow mullions.

The small school has thirteen classrooms. The kindergarten is combined with lower grades 1–3, while the three upper grades are separated by the layout of the building. All rooms have direct access to outdoor paved play areas. An open library is part of the lobby, the idea being that the more accessible the books are the more they will be read. A stage is located between the multipurpose room and related activities room and opens to each area. With curtains closed on both sides, the stage becomes another teaching space.

Ceilings have been given interesting treatment. In classrooms, ceilings slope cosily down to the window wall. In the multipurpose room, ceiling beams meet at the center to form an interesting umbrella effect. Construction, equipment, and site development costs totalled $502,417.

Three-Story Compact

A site limitation of ten acres dictated a compact square for the new East Junior High School in Richfield, Minnesota. Architects Thorshov and Cerny, Inc., of Minneapolis, relieved the monotony of the cube by alternating light and dark face bricks which helps to detract from the actual mass of the three-story structure.

The first floor has a gymnasium and toilet room core with administrative and health offices, shops, and a music suite along the perimeter. Second-floor classrooms enclose the upper portion of the gymnasium. Art, mathematics, and science rooms on the third floor surround a light court above the gym roof. A connecting single-story unit houses cafeteria, auditorium, kitchen, and boiler room. The one-story building permitted low cost construction, separation of activities, and easy accessibility by the community. Compact plan of the main building shortens class-to-class circulation.

Construction materials were chosen for minimum maintenance. Corridor walls are glazed tile and floors are terrazzo. Classrooms have plaster walls and asphalt tile floors. A ten-foot well supplies water to the school and dry walls on the site serve as storm drains. Capacity of the building is 1,500. Construction and equipment costs totalled $2.3 million. •

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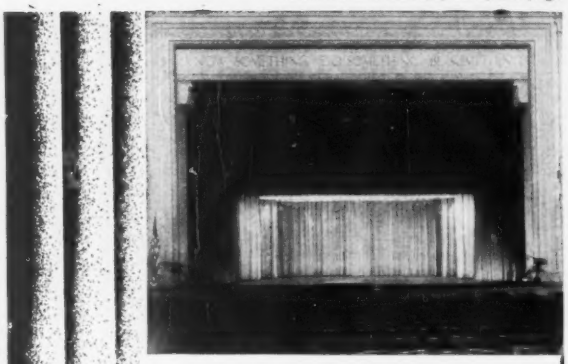

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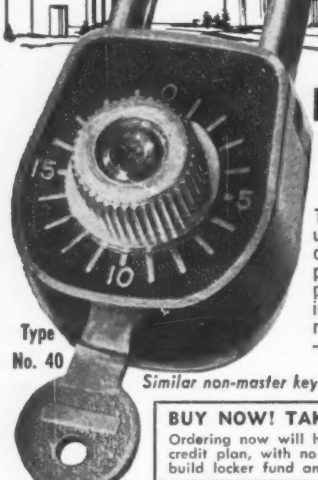

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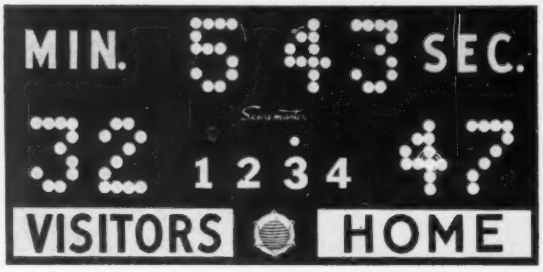

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EXECUTIVE'S BOOKSHELF

GROWING UP ABSURD

By Paul Goodman. New York: Random House. 300 pp. $4.50

Move over, Vance Packard! Make way, David Reisman! Make place for one more Angry Middle-Aged Man. And place he should have, not only because our pluralism permits and demands dissent. Nor yet, as with Packard and Reisman, because the dissenter is driven by the discipline of his scholarship as well as by devotion to the welfare of society. Goodman earns his place by pure passion.

Informed, knowledgeable, ideologically consistent he may be, but this is an angry outcry. It is more than indignation, less than despair with which he observes and comments on the "closed system" which is his characterization of American society.

His explanations of the why's and how's of juvenile delinquents, of beatniks and of organization men are startling, yet their truth must be measured like the truth of the novelist rather than of the social scientist.

One would have to be heavily armored indeed to assay this book as a work of scholarship. And because it is so personal one may reasonably expect it to reinforce his own prejudices. It is a dangerous book for the comfortable, a maddening one for those with a well-structured view of society. But to those who care about education, who are concerned with a kind of society which will be consistent with "human nature" and with the age-long aspirations of mankind, this is worth the emotional wear and tear in its reading.

"It's hard to grow up when there isn't enough man's work," he says. "It's hard to grow up in a society in which one's important problems are treated as non-existent." But OVERVIEW's readers are more than normally aware of problems, and perhaps (although Goodman won't believe it) trying harder than most to make their work "man's work" (useful, justified by direct and felt contribution to the social weal). They will wince and wriggle their way through a book which is always impassioned, sometimes obscure, and occasionally flagrantly impressionistic.

EDUCATION AND THE HUMAN QUEST

By Herbert A. Thelen. New York: Harper & Brothers. 224 pp. $4.75.

This is the book-of-the-year for the thoughtful educator. Fortunately a part of its greatness is trenchancy and readability which makes it hard to put down. Evidence of its impact on OVERVIEW's editor is that publication of this review was deliberately postponed a month to be sure that his enthusiasm was not a passing fancy. It's not.

"We know a great deal about the nature of man, knowledge, and society; about the dynamics of learning by individuals; about the factors affecting group performance; about intergroup relations and social action; about community improvement. But most of this knowledge has so far made almost no dent at all on educational practices. . . . This state of affairs is downright maddening . . . is grave; more, it is immoral, for to act ignorantly when knowledge is available . . . is the worst crime of civilized man."

So Mr. Thelan tells us in his Prologue. In the body of the book he skillfully selects, synthesizes and classifies the knowledge to which he refers. Chapter 1 is worth the price of the book by itself—as is the Epilogue. These are too good to spoil by summary or even quotation.

In Chapters 2, 3 & 4 he looks at the nature of Man, of Knowledge and of Society. Then he proceeds to build the basic suppositions of an educational theory under the head-

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ings Personal Inquiry, Group Investigation, and Reflective Action, and spells out how schools might be affected by these suppositions. A special case is the chapter on Skill Development, because it is "subsidiary to and facilitative of the other kinds of inquiries."

In Chapter 2 he wrestles with the problems of getting schools changed. There is no blueprint but there are soundly based proposals.

This is a major contribution to clear thinking about our schools—with overtones for every level of education. It is rare for a book to be so immediately engrossing, so full of good sense, and so appealing for its felicity and asperity.

THE ESSENTIALS OF FREEDOM

Edited by Raymond English. Gambier, Ohio: Kenyon College. 180 pp. Paperbound, $1.50.

A dozen articulate leaders of American thought contribute discussions on many aspects of freedom in papers which were presented at a conference at Kenyon College. We who could not attend the conference are genuinely privileged to have these stimulating presentations brought together in so useful a form.

If freedom—the idea and practice of ordered liberty—is to persevere and grow in our society, we must all share the responsibility of understanding its essentials—an understanding enriched and deepened by the reading of these essays.

GOVERNANCE OF COLLEGES AND UNIVERSITIES

By John J. Corson. New York: McGraw-Hill Book Company, Inc. 209 pp. $5.50.

Many books and articles have been written on problems of academic administration, but a surprisingly small literature has taken for its field the whole of governance of institutions of higher education. The decisions to be made are much the same in any college or university, but the process, the manner, and the structure of decision-making is almost infinitely varied among American institutions.

Mr. Corson has undertaken a large and eminently useful task. His overview of "the process or art of governing" and "the action or manner of governing" (to quote the Oxford English and White's Political Dictionaries respectively) is competent and helpful.

All those with a role in the decision-making in colleges and universities will read this with profit; all interested in educational institutions, with interest. Certainly it provides a most useful understanding of how colleges and universities are governed. In turn, this becomes valuable in any effort to improve the decision-making process or even to get urgent decisions made.

THE PROCESS OF EDUCATION

By Jerome S. Bruner. Cambridge, Mass.: Harvard University Press. 92 pp. $2.75.

It's fascinating to see how readily we turn to books about education written by those whose interest is newly roused. We're flattered as our area of commitment and competence gets the spotlight. Certainly we resent the hastily assumed competence so often proclaimed. Yet we can learn much from those with a fresh view.

Professor Bruner bases this book on a September 1959 conference called by the National Academy of Sciences at Woods Hole, but makes no claims that it represents the consensus of the thirty-five distinguished scholars in attendance. The basic assumption underlying the whole book is that "intellectual activity anywhere is the same, whether at the frontier of knowledge or in a third-grade classroom."

On this assumption he examines the role of "structure" in learning, the integrative principle which relates facts and techniques, the understanding of fundamental principles and ideas which bring order into a field of learning. He looks at readiness for learning—and assumes that any subject can be taught to any child at any stage. Then he speculates about intuitive thinking and how it could be fostered.

The chapter "Motives for Learning" examines the whole educational

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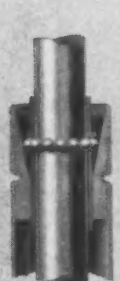

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Bookshelf (continued)

and social scene. It is a series of intelligent but not novel observations. Its best feature is a discussion of the dangers of "meritocracy."

The book is important primarily because it lets us educationists in on the kind of thinking and discussion that go on when a number of professional scholars get together to talk about education.

THE LIBERAL HOUR

By John Kenneth Galbraith. Boston, Mass.: Houghton Mifflin Co. 197 pp. $3.50.

Mr. Galbraith took his title from a description by Adlai Stevenson of the period just before presidential elections "when even the most obsolete men become reconciled, if briefly and expediently, to the realities of the present world." This sets the tone of the book—chiding but relaxed.

This is not for the solemn. In fact Galbraith says it is possible that our greatest danger is from "our terrible solemnity." "The reasonably relaxed man can accept correction (and change) without too grievous loss of dignity. But the solemn man cannot."

Much of the material has appeared before—and none of it has great surprise for those who are acquainted with Galbraith's writings. But it is readable, and worth the reading.

THE EFFECTIVE BOARD

By Cyril O. Houle. New York: Association Press. 174 pp. $3.50.

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which have been tested and have survived critical discussion by hundreds of board members.

Government of Public Education for Adequate Policy Making

Edited by William P. McLure and Van Miller. Urbana, Ill.: Bureau of Educational Research, College of Education, University of Illinois. 103 pp. $2.

Social Status and Leadership—Educational Research Monographs No. 35

By Melvin Seeman. Columbus, Ohio: College of Education, Ohio State University. 156 pp. Cloth, $4. Paper, $3.

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13th Yearbook of the American Association of Colleges for Teacher Education. Washington, D. C. Edward C. Pomeroy, Exec. Secy. 285 pp. $2.50.

The Protection of Minorities

By J. A. LaPonce. Berkeley, Cal.: University of California Press. 236 pp. $5.

The Education of Children and Youth in Norway

By Helen Huus. Pittsburgh, Pa.: University of Pittsburgh Press. 247 pp. Cloth, $6.50. Paper, $4.50.

Audio-Visual Techniques in Teaching Foreign Languages

By Theodore Huebener. New York: New York University Press. 163 pp. $3.25.

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By Thomas J. Pepe. New York: Dover Publications, Inc. 289 pp. $1.35.

The Old Farmer's Almanac—1961

By Robert B. Thomas. Dublin, N. H.: Yankee, Inc. 96 pp. 35¢.

New Directions in Financing Public Schools

Published by National Education Association, 1201 Sixteenth St., N. W., Washington 6, D. C. 143 pp. Single copy $1 (quantity discounts). •

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Ad Astra with the President's Commission

EMPHASIS ON THE importance of education permeates practically every section of the President's Commission on National Goals. Calling for "high and difficult" national goals for 1960's, the Commission has underlined the role of education in securing individual freedom, in maintaining adequate national defense, in aiding the newly emerging nations of Africa and Asia, and in building a nation and a world "in which every human being shall be free to develop his capacities to the fullest."

The report was prepared at the request of President Eisenhower by ten leaders in business, education, and labor under the chairmanship of Dr. Henry M. Wriston, president of the American Assembly, Columbia University, and former president of Brown University.

Citing the perilous times in which we live, the Commission nevertheless pointed to the equally great opportunities that confront us. "With the increase of knowledge and material resources, we have achieved a standard of individual realization new to history. We can continue to improve our own way of life, and at the same time help in the progress of vast numbers in the world whose lives are blighted by chronic sickness, hunger, and illiteracy."

At the root of the Commission's recommendations is its concern for the status of the individual. "All our institutions must further enhance the dignity of the citizen and promote the maximum development of his capabilities."

Recognizing the "subtle and powerful" pressures toward conformity, the Commission urges that these be resisted because freedom of expression is essential. Schools and institutions of higher learning, trustees, board members, and legislators have a particular responsibility to ensure freedom of expression by students, faculty, and administrators alike.

"Vestiges of religious prejudice, handicaps to women, and most important, discrimination on the basis of race must be recognized as morally wrong, economically wasteful, and in many respects dangerous," the report demands.

Specifically, it calls for discrimination in higher education to be entirely overcome by 1970 and "progress in good faith" toward desegregation of publicly supported schools in every state.

Annual public and private expenditure for education by 1970 must be $40 billion, the report states. (This is double the 1960 figure.) "It will then be 5 percent or more of the gross national product, as against less than 4 percent today." At least $33 billion of this total must come from all levels of government. Recognizing that education is primarily a state responsibility, the report never-

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theless calls for an expanded federal role. This is necessary because state and local appropriations have more than doubled since 1950, the report points out.

Federal aid to higher education must include increased scholarship and loan funds, support of research, and direct assistance for buildings and equipment. Grants to public schools should be on a matching basis to wealthier states, and in the form of outright grants to states where per capita income is too low to maintain an adequate school program.

The Commission commended those few states which have as high as four-fifths of their youth completing high school and one-half enrolled in institutions of higher learning. However, it decried the fact that many states have less than half completing four years of high school and less than 20 percent entering college. "Within the next decade," it recommends, "at least two-thirds of the youth in every state should complete twelve years of schooling and at least one-third enter college."

There must be more and better teachers, enlarged facilities, changes in curriculum, and new teaching techniques, the report states.

Other recommendations:

- Small and inefficient school districts should be consolidated, reducing the total number from over 40,000 to about 10,000. (Latest Office of Education figures show that only 13 percent of all U. S. school systems enroll a minimum of 1,200 pupils. Another 35 percent enroll fewer than forty-nine pupils.)
- Every state should have a high level board of education.
- Teachers salaries at all levels must be improved.
- Two-year colleges should be within commuting distance of most high school graduates.
- Graduate school capacity must be approximately doubled.
- Adult education should play a vital role, stressing the new emphasis on education throughout life.

The Commission concedes that the goals can't be accomplished easily: "Every American is summoned to extraordinary personal responsibility, sustained effort, and sacrifice." •

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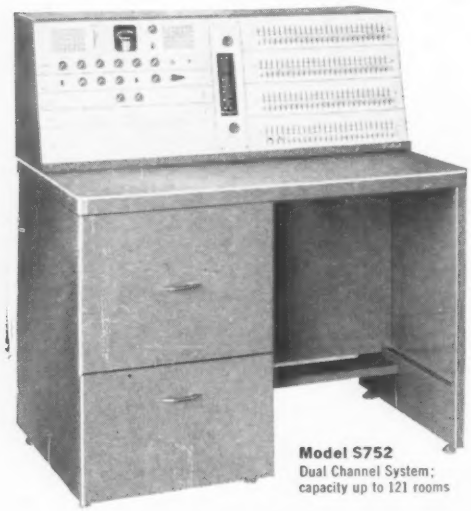

Model S752
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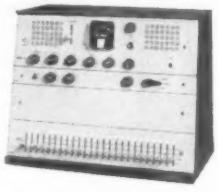

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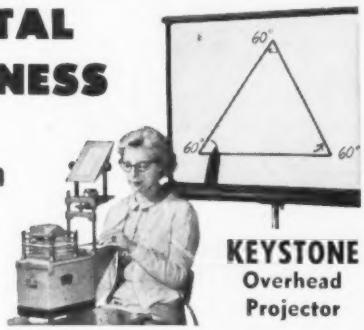

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2. **Social Studies** Transparencies, standard size, 3¼ x 4 in.
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New Urban Role

Rising student costs, tighter admission standards, university research, and urban renewal each took a share of discussion at the recent meeting of the Association of Land Grant Colleges and State Universities.

For the most part, the thousand college presidents and officials reaffirmed their belief in the responsibility of the 99-year-old land grant schools to provide broad educational opportunity for *all* students.

Retiring president Clifford Hardin, chancellor of the University of Nebraska, sounded the keynote when he said that limitations of space, staff, and money should have "no bearing on our total commitment to a general policy of broad educational opportunity."

Urging even tighter admissions standards and "quality control," Prof. Jean Failing, New York State College of Home Economics, Cornell, said, "we must refuse admission to those not able to take full advantage of higher education," adding that colleges have a moral responsibility to discourage students from making a large expenditure for a higher education from which they can't profit.

Participants heard of a new opportunity for the land grant schools to serve urban populations in the way they now serve rural areas. An urban counterpart of the time-honored agricultural agent may provide an answer to some of the problems caused by rapid expansion of the nation's cities. Chancellor Hardin explained that with the change in population from a rural to a predominantly urban nature, colleges must make corresponding changes in their extension services.

The University of Missouri is combining its extension activities and is using community development to bring its educational program to everyone in the state, explained President Elmer Ellis. Plans call for county and city offices to serve as university centers with the present county agent becoming director of the center.

The college presidents admitted a common fear: that heavy government support of university research programs is creating an imbalance. The bulk of federal money is going to a few large schools and is directed to research affecting national defense, such as atomic energy, physics, and space.

Adopting a realistic attitude, President Eric Walker of Pennsylvania State University, said that since research has become a "national necessity" most individual scientists must forego "wildcatting" and accept direction and coordination of research projects. "Research is no longer the private property of a handful of savants . . . and scientists and research workers have become, whether they like it or not, deeply involved in the affairs of the world."

Connecticut Educators View Ribicoff Appointment

Appointment of Connecticut Governor Abraham A. Ribicoff as Secretary of Health, Education, and Welfare is being viewed with satisfaction by educators—especially those in his home state. In telephone interviews with several Connecticut educators, it became apparent that Ribicoff is considered a solid friend of education.

Ribicoff: New HEW Secretary

Although the 50-year-old former Congressman has no specific experience in education, his record as a diplomatic and competent administrator leads educators to believe President-elect Kennedy made a wise choice in his first cabinet appointment.

Dr. William J. Sanders, Connecticut's commissioner of education, points out that although the governor is not in a position to initiate education legislation, he has actively supported the program put forth by the state board of education. Sanders described Ribicoff as "interested and aware of the problems of education and in their solution." The Governor's desire to get Connecticut's problems solved, Sanders added, did not detract from his intention to keep taxes down and work within the established tax structure.

Sanders said that Connecticut's system of public and higher education was in a relatively good position, and that the Governor deserved "a great share of the credit" for this.

During Ribicoff's administration, the state has increased its share of education costs. In 1957, the state increased its payments to local school districts by $21 per pupil. State grants for school building were also raised at that time.

Ribicoff has also supported plans to extend opportuniites for higher education, according to Richard Rausch, principal of Webster Hill elementary school in West Hartford. Aside from the growth of the Uni-

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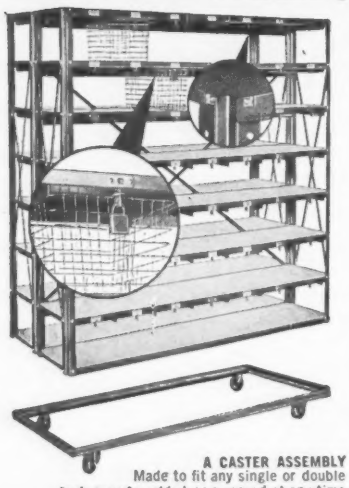
WITH RECESSED HASPS



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2. Your choice of *any size* to fit odd baskets or limited space*,
3. *Easier assembly*, hasps and dividers installed at the factory,
4. *Recessed hasps* can't snag clothing or cause injury, (Hasps omitted if desired)

plus a choice of four popular baked enamel finishes, plated hardware, sturdy bracing, and other details of quality.

STORAGE SHELVING with patented twin-post corners

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Roundup (continued)

versity of Connecticut, four state teachers colleges have been transformed into liberal arts colleges with corresponding improvement in their curriculums. Ribicoff has also promoted the two-year community colleges, according to Rausch.

Ribicoff has done a good job as governor and will do a good job as HEW secretary, says Robert Linstone, principal of Huckleberry Hill elementary school in Avon. Linstone notes that Ribicoff has been "highly vocal" in favor of higher salaries and better working conditions for teachers. In addition, he has been in the forefront of those fighting for a new medical and dental center to be set up as part of the state university in the greater Hartford area.

Ribicoff himself, when contacted, said he could not discuss basic educational policy until after the inauguration. He declared that the President-elect would formulate his program and "It's my job to execute it." The governor added that he agreed with Mr. Kennedy that medical care for the aged and federal aid to education are two of the most important issues in the country.

As for a possible successor to Commissioner of Education Lawrence Derthick, Ribicoff said he had not had time to consider the matter.

Ribicoff was elected governor in 1954 when he upset incumbent John Lodge and was the only Democrat on the state ticket to win. Voters showed their approval of his program in 1958 when he was re-elected to a second term by a 246,000 majority —the largest in state history.

12 Months for Merit

A new concept of merit rating for teachers is receiving study from the Washington Education Association. The plan is tied into a twelve-month term of employment.

The plan would separate the teaching staffs of school districts into two categories—one would be responsible for classroom teaching duties only; the other would be available for professional assignments in addition. The first group would be

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employed on a nine-month contract; the second for twelve months, with a three- or four-week paid vacation.

Teachers applying for twelve-month contracts would have to demonstrate their superiority as classroom technicians aside from their ability to make a contribution in other professional areas.

Summer projects would include curriculum development, in-service training, textbook review and selection, test analysis, and research, which have been sandwiched into the regular year, on weekends and after school hours.

Vote of Confidence

Voters across the nation approved a record volume of municipal improvement bonds in 1960—and elementary and secondary school issues led the way. On the basis of still incomplete tabulations, the Investment Bankers Association claims that school bond approvals reached the highest level on record.

The IBA predicts that the rising trend will continue through the coming year.

During the first eleven months of 1960, voters approved $1,596 million in elementary and secondary school bonds. This represents an increase of 58.3 percent over the $1,008 million approved during the corresponding period in 1959.

Approval ratio for the period has been running somewhat higher than 80 percent, or 3 percent higher than for a similar period in 1959.

Topping the year in an overwhelming vote of confidence in the schools, voters in the November elections approved $361 million of school bonds out of $421 million (85.6 percent) submitted for their approval. Although the combined total of all municipal bonds approved in November set a new record for the month, voters were selective. They gave top priority to education issues—with notable exceptions in St. Louis and Pasadena—and their lowest priority to public buildings.

In these two cities, school issues lost even though they received a majority of the vote because they failed to carry the required two-thirds ma-

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Robert E. Dawson, Director,
General Extension, Scranton Center
PENNSYLVANIA STATE UNIVERSITY

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"Will you kindly forward to me six (6) copies of your card 'Care of Chalkboards.'★

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jority. Defeat of a $29.5 million school bond issue in St. Louis was the third of the year, and Pasadena voters failed to okay a $13.5 million issue that would have financed a new city college and permitted conversion of the present one into a needed high school.

Among the largest issues receiving approval in November:

- A $195 million issue to build new facilities at the University of Illinois, Southern Illinois University, and teachers colleges in the state.
- A $47.5 million issue in Oregon for higher education (especially noteworthy since state voters rejected a smaller bond issue for state buildings).
- A $153 million dollar Los Angeles issue for elementary and high schools and junior colleges.
- A $36 million issue in Baltimore for city and county schools.

Accounting for the steady rise in bond sales since mid-1959, IBA reports that financing of public schools has become a matter of growing public interest, as well as a major political issue.

Teachers Seek Reforms

The American Federation of Teachers has called for major reforms in school personnel policies in order to retain teachers. In a survey of 100 districts, it questioned AFT local presidents in cities ranging from 4,000 population to eight million.

AFT hopes to find out why 10 percent of the nation's teachers leave the classroom each year for other jobs. It believes the teacher shortage can be corrected through improved grievance procedures, better personnel handbooks, and leadership in place of drivership from administrators.

Three-fourths of the systems polled reportedly have no official grievance procedures. Many that do provide for no appeal from the principal's ruling. Prevalent feeling was that "right or wrong" the superintendent will always uphold the principal.

Over half the districts reported no

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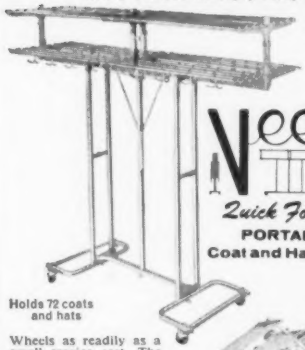

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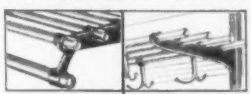
Sets up with a sweep of the arms . . . in 2 or 3 seconds.

Wheels through ordinary doorways. 4' x 8' area stores racks for 720 people.

Write for Bulletin VP-51



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No. VP300 has anchor coat hooks below hat shelf.

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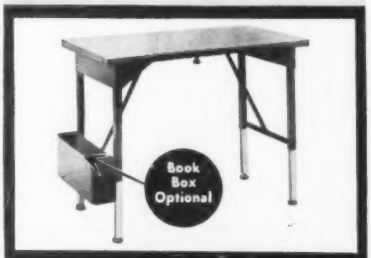

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regularly defined school day and about the same number reported that teachers could not decline extra assignments without prejudice. The vast majority provide no extra compensation for all assignments beyond the school day, but a number of these pay for "major assignments."

Teachers in one-third of the systems felt that their opinions were respected by the administration, but in less than one-quarter did they rate their administrators as consistent and impartial. Administrators in only half the districts were reported tolerant of those who differ.

Atomic Grants

Broadened support to American universities for programs in atomic energy research has been approved by the Atomic Energy Commission. Support is planned for teaching, research, and facilities.

In addition to providing funds for current research, the AEC will finance buildings needed for on-campus atomic energy projects. This shortage of buildings and facilities—placed at $5 billion—has been called the biggest bottleneck the universities face.

AEC will also make grants to colleges of arts and sciences, as well as to engineering institutions, for equipment useful in general nuclear education.

As a third phase, an increased percentage of AEC support for basic physical research and biochemical research will be shifted to the universities and away from the AEC's own national laboratories.

To implement the program, the Commission has just announced grants totaling $1.5 million to 113 educational institutions for the purchase of laboratory equipment needed to initiate or expand their nuclear education programs in the life and physical sciences and engineering.

In the past four years, the AEC has provided $18.4 million to 330 colleges and universities for instructional equipment. The Commission has also loaned about $10 million worth of nuclear materials to many of these institutions.

Meanwhile, the Republic of China

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How VU-GRAPH "TEACHING ASSISTANTS" Extend The Capacity Of Your Present Faculty

By Stephen D. James, M.A. English, M.A. Ed.

Beseler Vu-Graph Overhead Projectors can be valuable, time-saving "teaching assistants" that expand the teaching capacity of your present faculty. This has been convincingly demonstrated in several long-term programs which have been sponsored in the interest of improving teacher utilization and efficiency.

HOW VU-GRAPH MAKES AN EFFICIENT TEACHING "SYSTEM"

Vu-Graph has actually been made the center of a highly efficient new teaching system. It permits a single teacher to handle extremely large classes . . . even groups of classes, in "teamwork" projects. The unique flexibility of Vu-Graph makes it far more than a simple "visual aid" because it lets a teacher—project transparencies behind her from the front of a fully lighted room . . . face her class . . . write, sketch, erase or test on the projected image . . . project overlays to build a complex picture in simple steps . . . and prepare lessons in advance on cellophane or acetate rolls.

WHAT VU-GRAPH IS

Vu-Graph is an "over-the-shoulder" or overhead projection instrument which permits placement of transparent visual aids on a self-illuminated horizontal projection stage. The glass cover over the large aperture of the stage also provides a writing surface at a convenient, normal position. The projection stage holds a support post for a projection head that stands above it. The lens-mirror assembly of the head, pointed downward at the aperture, "sees" the transparent material and casts a huge, brilliant image behind the operator.

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The Vu-Graph image is so brilliant and large (up to 13' x 13') that it may be seen from every corner of a room fully lighted by bright sunlight or artificial illumination. Learning value of visual aids used on Vu-Graph are greatly multiplied; students may take notes or do written exercises during projection. Class control or ventilation problems of darkened rooms are non-existent.

TEACHER FACES CLASS, SEES RESPONSE

The combination of Vu-Graph projection behind the teacher with its ability to produce a brilliant image from the front of a fully lighted room means the teacher faces her class. She observes individual expressions that tell her whether to proceed, or stop to emphasize or repeat.

TEACHER WRITES, SKETCHES, ERASES OR TESTS

A teacher may write, sketch or erase spontaneously on transparencies as she projects them, making a "live" teaching medium of Vu-Graph visual aids. Equally important, cellophane or acetate rolls make Vu-Graph an "electric blackboard" for grammar exercises, arithmetic problems, science diagrams, tests or other lesson materials. Prepared in advance or before students' eyes, they may be re-used. This saves countless hours otherwise spent erasing and rewriting on a chalkboard; writing space is never limited and material can be seen from every seat.

OVERLAYS BUILD COMPLEX CONCEPTS IN SIMPLE STEPS

Overlay transparencies on Vu-Graph start with a simple idea and add steps to complete a complex concept. An unusually concise method of teaching in any subject, it minimizes confusion and eliminates time-consuming unnecessary explanation or discussion.

VU-GRAPH TEACHING ASSISTANTS IN YOUR SCHOOL

Properly used, a single Vu-Graph shared by your present faculty—or one in each classroom—can pay rich dividends in better teaching, better learning and in more effective use of your present budget. For a copy of an informative booklet "Use Of The Vu-Graph As An Instructional Aid" and, if you wish, a free no-obligation demonstration, write to:

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is setting up its first nuclear reactor with the assistance of the University of Michigan. The aid to Formosa is part of the University's world advisory program to help under-developed nations establish their own atoms-for-peace projects. The Chinese reactor, at the Tsing Hua Institute of Nuclear Science, begins operation this month.

Not Separate Enough

Separation of church and state is being "ignored" and "abridged" in parts of the nation, delegates to the annual meeting of the National Organization on Legal Problems of Education were told.

A variety of "subterfuges or devices" is being used to violate this Constitutional guarantee, declared Harry N. Rosenfield, Washington attorney. Among them he cited these:

• **Bible reading**—The Bible is the most sectarian of all books, Rosenfield said, and it's literary value does not divest it of its sectarian nature.

• **Religious holidays** — Christmas and Easter are religious holidays and their observance isn't rectified by further breaking the law to observe Chanukah or for joint observances, he pointed out. The only solution is the "wiping away of all religious observances" in the schools.

• **Released time for religious instruction**—This form of segregation by religion is no less unreal than segregation by race, Rosenfeld said. The practice exerts serious psychological pressures on the children, magnifies religious differences, and introduces tensions. As a "subtle social pressure exerted by the school," Rosenfield said he would not be surprised to see the Supreme Court rule all such programs unconstitutional within the next ten years.

• **Federal and state aid**—Rosenfield sharply criticized the doctrine that such auxiliary services as transportation and textbooks aided the child, not the school. "This child benefit theory has evaded the real issue." The real criterion is whether the services promote religion and religious instruction, he declared.

In addition, Rosenfield declared that religion itself has crept into the school curriculum in some places. "Teaching moral and spiritual values is not for the public schools," he countered.

No Belgians Need Apply

Efforts are being made to solve the acute shortage of teachers in the Congo Republic, formerly Belgian Congo. UNESCO has given approval to plans for recruitment of 500 French speaking teachers for Congolese schools. The organization is sending out a world-wide appeal (except to Belgium) for teachers to take up posts in secondary and technical schools.

The cost of transportation and salaries, totalling $3.4 million, will be paid by the United Nations from its Congo fund. •

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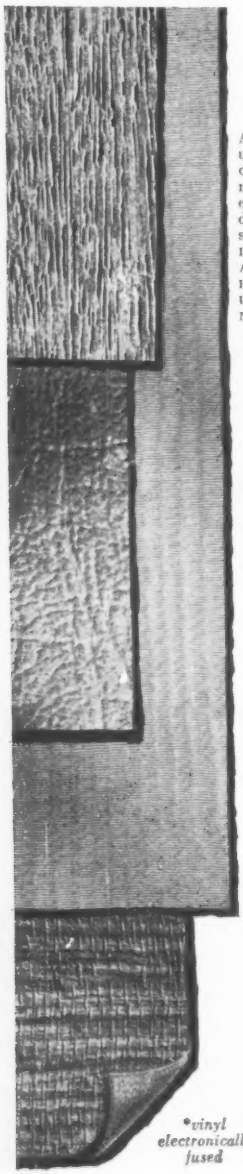

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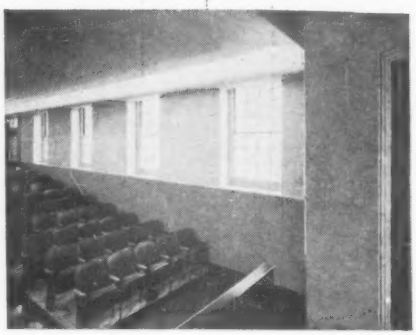

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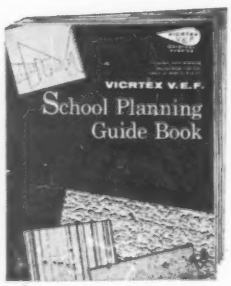
Ideal for walls, bulletin and tack boards, blackout curtains, panels, doors and other surfaces. Vicrtex V.E.F. Vinyl Fabrics never show thumbtack marks, scuffs, digs or scrapes. Minimum maintenance means extra savings, too.

Combine long-lasting beauty with economy in your school. *For a host of imaginative ideas, write now for your copy of the NEW VICRTEX VEF SCHOOL PLANNING GUIDE BOOK.*

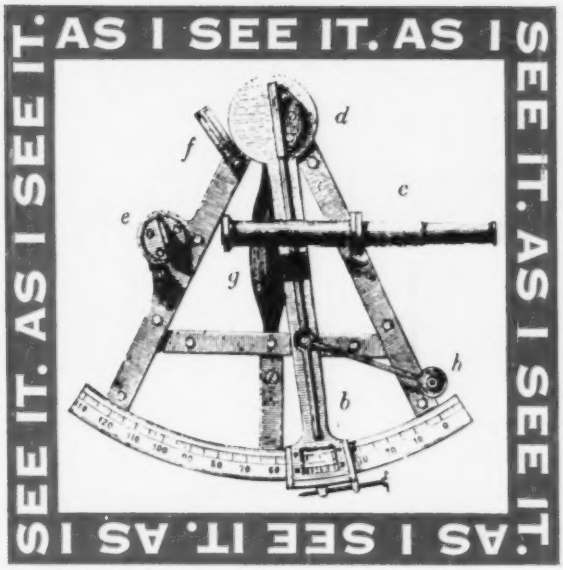


*vinyl electronically fused

L. E. CARPENTER & COMPANY

Empire State Building, New York 1 • LOngacre 4-0080
Mills: Wharton, N. J.

Vicrtex Wallcoverings conforming to U/L specifications now available on request.



National Purpose and Education

Walter D. Cocking comments on the current scene

IN RECENT MONTHS we have heard much about Our National Purpose. Outstanding Americans have expressed in writing and on television their beliefs regarding the purposes we have had, continue to have, and which should guide us in the future. They have spoken in many eloquent phrases. They have caught the imagination of thousands. They have challenged the thinking of their fellows.

It is healthy for any people to consider the roads they follow and the goals they seek. But this is not enough. We need to consider how we shall attain these national purposes. I should like to propose that the most important road we can follow to achieve our national purposes is the *road of education.*

It is not a road of the *past,* it is a road of the *future* we must follow. We are faced with fresh problems, an expanding technology, new social and economic situations, exploding political forces all over the world. The aspirations of man for freedom, for greater material and spiritual satisfactions remain the same.

Ignorant man cannot hope to cope with the world of the sixties. Even the best educated will face problems of such magnitude and complexity that they will be challenged to the utmost. Geography, military might, economic affluence, political power by themselves cannot save us or even provide reasonable security. As never before in history, man must depend on his intellectual and spiritual strength. It is the job of education to provide it.

What then is this new education to be? It must look to the future for its goals and substance rather than to an impractical and ineffective past. It must accept as its task the development of every individual everywhere. It need only be pointed out here that such a view will indeed be a new departure. The potential of every individual will have to be stretched to the utmost. Bodies of common subject matter to which all will be subjected will not do. Ways must be found to develop programs for individuals based upon their unique needs. Teachers of great intellectual strength and personal magnetism must man education's ramparts. In turn those who teach must justify by what they do the new confidence reposed in them.

The problems education must resolve are real problems not imaginary ones. Among them are: How to grow sufficient food and fibre and distribute it efficiently to the ever increasing millions who need it. How to eliminate and control disease. How to help all men to secure their fair share of consumer goods. How to use technology in all its forms for every man's good. How to live together peacefully, settling disputes in good will through use of intellectual power rather than military might. How to develop and advance man's need and desire for spiritual strength, and his ever onward quest for beauty and harmony in all things and among all men. How to conserve soil and forests. How to plan and build homes, public buildings, and industrial plants so that they achieve well the purposes for which they are built and also provide beauty. How to use the ever onward conquest of the physical universe for man's good. How to help man to build his value system so that it reflects a higher order of the worth and dignity of every man.

These are indicative of the tasks of education in the days ahead. They call for rethinking much of what we have been doing in the name of education. Certainly such tasks require new research, new planning, new organization, and a new and better quality of personnel.

National Purposes are the stars we would reach. Education is the wagon man must use to approach the stars. ●

PRODUCT PREVIEW

For Safety's Sake

FLAMEPROOF DRAPERY

Saranspun drapery fabrics can do much to enhance the beauty of large transparent areas. Because of the

fabric's outstanding flex-life and resistance to abrasion, it will take the wear and tear inevitable in institutional use. Saranspun is especially suited to traverse installations because it can be repeatedly flexed without fraying or cracking.

Inherently flameproof and largely fade-proof, the fabrics resist moths, mildew and moisture. They can be washed or drycleaned. In a complete line of prints and solid colors. The National Plastic Co., Odenton, Md.

Circle **OV-201** on reply card, last page

RUBBER PLAYGROUND MATTING

Safety Surf cushioning mats are designed to be used under playground apparatus to adequately cushion falls from all anticipated heights. Made of specially formulated, precision molded rubber 1" thick designed to fit tightly together with square type interlocks arranged in a zig-zag pattern to prevent disengagement by severe or repeated lateral forces. Original cushioning properties retained even after extended periods of outdoor weathering. Mitchell Rubber Products, Inc., 2120 San Fernando Rd., Los Angeles 65, Calif.

Circle **OV-202** on reply card, last page

ANTI-SLIP FLOOR FINISH

In their Super Anti-Slip Floor Finish, Simoniz offers a new concept in extra safe floor care. The anti-slip factor is such that the product retains full lustre, hardness and durability. Suitable for all resilient and hard floors. Simoniz Co., 2100 Indiana Ave., Chicago 16, Ill.

Circle **OV-203** on reply card, last page

BUS PUBLIC ADDRESS SYSTEM

For safer operation of school buses, the DuKane Corp. has introduced a "hands free" PA system which uti-

lizes a transistorized 4 watt mobile amplifier and a close-talking microphone designed to operate on any 12 volt DC power source. The driver merely leans toward the microphone and makes his announcement without removing his hands from vital driving controls. To prevent unauthorized use, the system is circuited to operate only when the ignition switch is turned on. Equipment includes a compact amplifier for mounting above the "stop" sign control handle, and loudspeaker horns for inside and outside installation. The DuKane Corp., St. Charles, Ill.

Circle **OV-204** on reply card, last page

SAFETY MATTING

Musson Perforated Mats feature a pyramid surface which provides saf-

est foot traction and maximum cleaning efficiency. Rubber feet under surface allow drainage and air circulation. Suitable for recess and surface installation, the mats are custom made in various designs including cloverleaf, round, hexagonal or rectangular. The R. C. Musson Rubber Co., 1320 Archwood Ave., Akron 6, Ohio.

Circle **OV-205** on reply card, last page

FIRE DOOR

A fire door with high pressure plastic laminate faces has been developed by United States Plywood and approved by UL. The doors are custom made with an incombustible Weldrok core and then shipped to installation sites prefitted and ma-

chined for approved hardware, if desired. The full Micarta range of color and patterns will be offered as facings. These doors are resistant to solvents, chemicals, heat, cold, dampness and staining agents and only require "damp cloth" maintenance. United States Plywood Corp., 55 W. 44 St., New York 36, N. Y.

Circle **OV-206** on reply card, last page

FIRST AID KIT

An instant cold pack for fast first aid treatment has been introduced by Kwik-Kold, Inc., in the form of a

plastic package of chemicals which becomes colder than ice when squeezed. The new pack, requiring no refrigeration or ice, provides 20°F. cold within only two seconds after being squeezed, the critical period to prevent swelling, pain and discoloration from injuries. Particularly designed for treatment of sprains, bruises, contusions, fractures and other injuries where immediate cold application is important. Kwik-Kold, Inc., Moberly, Mo.

Circle **OV-207** on reply card, last page

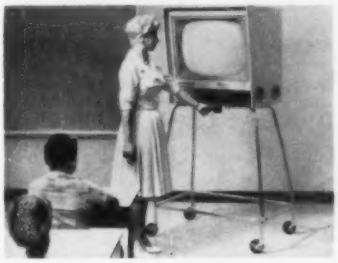
FIRE EXTINGUISHER

Fyr-Fyter Company's new All-Purpose Fire Extinguisher fights all three major classes of fires: general combustible, flammable liquid, and electrical. Two models are available: 20 lb. and 30 lb. capacities, both of which are UL approved. The extinguishers use a newly perfected dry chemical powder. Upon removal of the safety pin, the free-flowing chemical powder discharges in maximum volume the instant the unit's grip-fit handle is squeezed. Discharge range is 12 to 15 ft. No toxic fumes or odors are produced. The Fyr-Fyter Co., 221 Crane St., Dayton, Ohio.

Circle **OV-208** on reply card, last page

TV HAZARDS

Transvision has developed a new 24" TV receiver which is specifically designed to protect students against



flying glass, electrical shock, and other hazards. The receiver includes a TV picture tube shielded with a special laminated safety glass identical to the shatterproof glass used in automobile windshields. The unit also includes wide base mobile stands to prevent tipping over, a locked back panel which discourages student tampering within the set, a heavy-duty line cord, an all-wood cabinet and power transformer-type chassis. Transvision Electronics, Inc., New Rochelle, N. Y.

Circle **OV-209** on reply card, last page

CROSSING GUARDS

The heavy duty traffic stopper by McDermott runs 350 hours per set of standard batteries. It collapses down from its 7' height and may be rolled by a child. Uses standard incandescent lamps to get tremendous brilliance from condenser discharge. Can be obtained with red or amber lens. Julian A. McDermott Corp., 1639 Stephen St., Ridgewood 27, L. I., N. Y.

Circle **OV-210** on reply card, last page

ENTRANCE MATS

Parco-Link custom-built entrance mats are constructed in such manner that they wipe away dirt on shoe soles and thus help keep interior areas clean. They add safety, too, with their non-slip, non-trip surface.

Eleven attractive colors are available, which may be combined in any desirable pattern or color combination to provide a distinctive, eye-appealing mat. Pawling Rubber Corp., Pawling, N. Y.

Circle **OV-211** on reply card, last page

OF GENERAL INTEREST

FLOOR AND FURNITURE FINISH

Varmor is an all-purpose clear finish, equally suitable for floors and furniture. It withstands detergents, acids, alkalis, alcohol, salt water and cleaning fluids. Application is by brush, roller or spray. In 45 minutes, the new finish dries to a point where it will not pick up dust. After four and one-half hours, wood coated with Varmor may be walked on or receive its second coat. It may be subjected to hard use after 12 hours. This clear, glossy coating combines the required hardness for an excellent covering for floors and furniture with the degree of elasticity needed in an exterior finish subject to wide fluctuations in temperature, sunlight, and moisture. Pratt & Lambert, Inc., Tonawanda St., Buffalo, N. Y.

Circle **OV-212** on reply card, last page

FILMSTRIP CHANGER ACCESSORY

Strip-O-Matic is an accessory for remote operation of any Viewlex Combination Slide-Filmstrip Projec-

tor. A fast, smooth motor drive operates it in complete silence. Frames are changed by a simple touch of a button on a control handle held by the teacher from any point in the room. The unit also features a built-in, automatic film take-up. Viewlex, Inc., 35-01 Queens Blvd., Long Island City, N. Y.

Circle **OV-213** on reply card, last page

VINYL WALL COVERING

Congoleum-Nairn's new vinyl wall covering, Wall-Ever Vinyl, is well suited to schools because of its high resistance to acids, alkalis, grease, oils, ink, extreme temperatures, and frequent detergent washings. Sixty

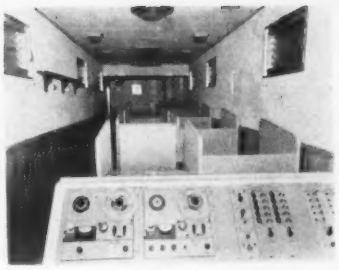
patterns and colors offer a wide range of decorating possibilities.

This product features a heavy-duty vinyl wear layer combined with a backing of vinyl felting that eliminates problems of design distortion caused by fabric show-through. The backing makes for easier installation because of unusually rapid adhesive absorption and excellent adherence even on non-porous surfaces. Congoleum-Nairn, 195 Belgrove Dr., Kearny, N. J.

Circle **OV-214** on reply card, last page

MOBILE CLASSROOM

A mobile classroom for teaching foreign languages in rural areas, consolidated schools and in elementary school programs where one such unit on wheels may serve a large number of students has been introduced by Rheem Califone Corp. It is housed in a ruggedly constructed trailer,



available in 35, 42, and 55 foot lengths, in 8 and 10 foot widths, and will accommodate from an 8 to a 27 station language laboratory. Fully air-conditioned and weatherproof, this can be an economical solution to the teaching of foreign languages in special areas. Rheem Califone Corp., 1020 N. La Brea Ave., Hollywood 38, Calif.

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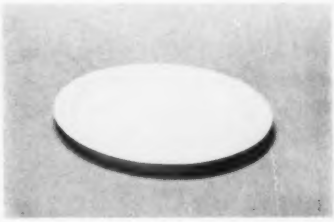
MOLDED PAPER PLATES

New design items by Keyes Fibre Co. are an oval 10″ × 12½″ white



molded paper platter plate for group or large individual servings, and a 16 oz. hot-cold bowl for soups and desserts that comes in pink, aqua and yellow. The new plate designs come with the slim, modern rim design. Keyes Fibre Co., Waterville, Maine.

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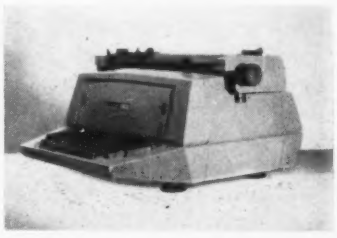
TYPEWRITERS

Underwood announces four new typewriters, three electric and one manual. The Raphael, illustrated, is



an electric which produces typescript with the sharpness of fine printing

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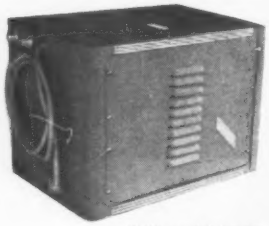
PROTECT YOUR PNEUMATIC CONTROL SYSTEM



ZEKS Model 101AD Self-Contained Refrigerated Compressed Air Moisture Condenser

Unless your pneumatic control system is provided with an efficient moisture removal device, you have a destructive moisture problem. We can protect you against this danger.

The air compressor, which is a basic component of the control system, is responsible for this moisture being in the system. It may not always be visibly evident, but, IT IS STILL THERE ! ! !

This moisture is a form of creeping paralysis; it gradually deteriorates the intricate mechanisms of the control devices. This same moisture, together with the foreign matter entrained in it, can clog the minute orifices and bleed ports, so essential to the proper operation of your pneumatic controls.

If any of the controls fail, discomfort and costly maintenance results. Your temperature control system represents a substantial investment. Protect this investment. Assure full, efficient, trouble-free operation of your system.

The low cost ZEKS Model 101AD Moisture Condenser is designed specifically for your needs. It is entirely self contained — has it's own cooling system — is easy to install — economical to operate — requires practically no maintenance. This moisture condenser removes the moisture before it can cause damage. Many schools have found it pays for itself in a very short period of time.

Most maintenance supervisors are aware of this problem and the need for proper moisture elimination. See your supervisor today — talk it over with him — then write for full particulars. Let us prove how the installation of a low-cost ZEKS dryer will save you money. Naturally at no obligation.

ZEKS

ZEKS INDUSTRIES, INC.

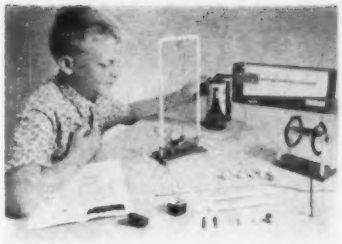
West Chester Pike Edgemont, Pa.

through variable spacing. Uses carbon ribbon. The Forum, another electric, features standard typewriter spacing. Equipped for either carbon or fabric ribbon, the machine is recommended for work stations where the print work must have outstanding quality. The third electric, the Scriptor, is priced below the normal electric typewriter price level, and is designed for use where the nature of the work load is sufficiently continuous to justify the capital investment. The manual is called Touch-Master Five, a light-touch machine producing quality work in normal typewriter spacing. For general purpose typing where the work load is light. Underwood Corp., 1 Park Ave., New York 16, N. Y.

Circle **OV-217** on reply card, last page

MAGNETS, COILS KIT

This new kit, by the Product Design Co., enables 5th to 9th graders to perform their own experiments in the operations of magnetism. The kit contains three Alnico magnets, four



coils, three erection bases, tool steel, six pieces of iron, a battery with leads, a magnetic wand, magnet wire, four compasses, iron filings, and various supports and accessories. Accompanying instructions outline ten simple experiments possible with the kit, but many more original tests may be performed with the equipment. Product Design Co., Redwood City, Calif.

Circle **OV-218** on reply card, last page

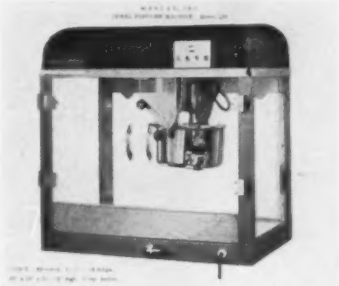
TAPE STORAGE

A new line of tape storage and filing cabinets is designed for language labs that use ¼" magnetic tape. Cabinets have an adjustable interior arrangement adaptable to any facility. Color-coded subject indexing and position retaining clips are featured, plus key locks, where desired, for maximum security. Manufacturer claims mis-filing is virtually impossible. The largest cabinet in the line accommodates 500 tapes. Neumade Products Corp., New York, N. Y.

Circle **OV-219** on reply card, last page

POPCORN MACHINE

Small school sized and priced, the Jewel counter popcorn machine of-



fers several advantages for a low

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TIFFANY® STANDS

Designed to make your equipment dollars go farther while making your classrooms...
QUIETER.....SAFER

MODEL 5000

GREATEST ALL PURPOSE, completely safe, Stand for costly office machines. Adjustable open top . . . noise-escape hatch. Castings cover retractable casters; anchor firmly on floor.

MODEL 8002

VIBRATION-FREE RIGIDITY. Square, tubular legs. Adjustable, one piece, open top . . . noise-escape hatch.

For further information, write Dept. OV

TIFFANY® STAND CO.
7350 Forsyth • St. Louis 5, Mo.

Circle **OV-172** on reply card, last page

1908-1961, 53 Years of Monroe Leadership

Monroe FOLD-KING

Monroe **FOLD-KING TABLE LINE**

FOLDING CHAIRS All-steel, also plywood or padded seat. Complete line. Direct prices, discounts. See Catalog.

TABLE and CHAIR TRUCKS The leader, 7 models, sizes — for transporting, storing. Smooth rolling, easy loading. See Catalog.

Monroe CATALOG in COLORS

UP TO **40% DISCOUNT**
TO CHURCHES & INSTITUTIONS

Kitchen committees, social groups, attention! Direct-from-factory prices—discounts up to 40%—terms. Churches, Schools, Clubs, Lodges and all organizations. Our new MONROE 1961 FOLD-KING FOLDING BANQUET TABLES are unmatched for quality, durability, convenience and handsome appearance.

NEW—Completely automatic lock on pedestals and legs. "Snaps" them rigidly in place, or folded flat. New pedestal and frame construction.

Mail coupon, write, wire or phone for our beautiful new catalog with color pictures of Folding Tables, Folding Chairs, Table and Chair Trucks, Portable Partitions, Bulletin Boards, Folding Risers and Platforms.

MAIL THIS SPECIAL COUPON TODAY!

Please send the new 1961 Monroe FOLD-KING Catalog – prices, discounts, terms.

Name of church, organization_____

Mail to_____ Title_____

Address_____

City_____ Zone_____ State_____

We are interested in (Tables, Chairs, etc.)_____

THE MONROE COMPANY 66 Church St. **COLFAX, IOWA**

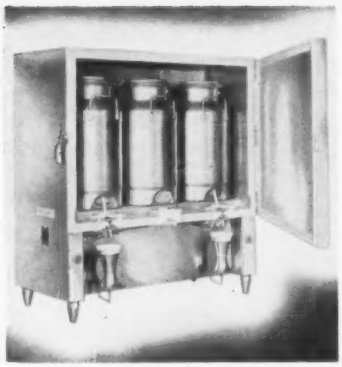
budget operation. It is designed to operate on a normal 110-volt circuit that has at least 14 amps. spare capacity. The machine has an 8-ounce kettle that will turn out a half pound of popped corn every three minutes.

The unit has a well lighted, glass enclosed case with enamel and chrome trim and a heated cabinet floor to keep popcorn hot. The dimensions are: 20″ × 30″ × 31½″. Manley, Inc., Kansas City, Mo.

Circle **OV-220** on reply card, last page

MILK DISPENSERS

Automatic portion control mechanism is now available on two of the Norris milk dispensers. A platform scale is manually set to dispense any desired amount of milk up to a full quart. The push button, located on the front of the dispenser, actuates an electric mechanism which dispenses exactly the correct amount of milk into the glass.



Automatic portion control is available on Norris models PC-15 Manhattan (3 5-gallon can size) and PC-10 Manhattan (2 5-gallon can size). Norris Dispensers, Inc., 2720 Lyndale Ave., S., Minneapolis 8, Minn.

Circle **OV-221** on reply card, last page

HEATING BY ELECTRICITY

"Heating Schools Electrically" is the title of a new brochure by Wiegand which demonstrates how Chromalox heating units do all sorts of heating jobs in schools. The equipment ranges from fully automatic classroom unit ventilator with flanking draft barrier and giant heating equipment for auditoriums and gymnasiums down to gentle heat for keeping food warm in the cafeterias. The bulletin presents installation illustrations, specification and product application data. Facts and figures are given case-history-fashion on an electrically heated high school. Edwin L. Wiegand Co., 7500 Thomas Blvd., Pittsburgh 8, Pa.

Circle **OV-222** on reply card, last page

EMERGENCY DORMITORY UNITS

Mobile homes "go to college" to supply inexpensive living quarters for the mushrooming student population looking for on-campus housing. Each DeRose Mobile Home contains four 2-man dormitory units designed to meet the special needs of on-campus living, with streamlined desks, bunk-type beds and ample storage space. These dormitory homes not only provide an economical solution to the growing housing problem our schools face today, but also are highly attractive additions to any campus as well. DeRose Industries, Inc., Chambersburg, Pa.

Circle **OV-223** on reply card, last page

Circle **OV-173** on reply card, last page

NEW CONCEPT IN SPECTATOR SEATING

STANDARD EZ-A-WAY FOLDING BLEACHERS

Offer you these original construction features: Square tubing; Steel understructure; Floating action — an innovation in EZ-A-WAY Bleachers; Slide support — designed to lock successive rows. EZ-A-WAY Bleachers are equipped with 4" diameter, 1½" wide non-marking wheels — in addition to the three features illustrated in the pictures to the right.

CORRECT POSTURE
COMFORTABLE
CUSHIONED
CONVENIENT

DELUXE EZ-A-WAY FOLDING BLEACHER COMBINATIONS

Seat your spectators in opera style . . . maximum comfort for premium seats . . . select colors to harmonize with your gymnasium. Cushioned opera style EZ-A-WAY Folding Bleachers offer you such oustanding features as: Foam rubber seat and back rest pads covered with desirable vinyl fabrics backed covering . . . Seat or back rest easily replaced if damaged . . . Individual seat delineation . . . Alternate seat colors if desired . . . Aisles as required . . . Easily folded away and prepared for occupancy.

OMEGA EZ-A-WAY — ELECTRICALLY OPERATED

A winning combination in spectator seating . . . electricity does the work with these new modern bleachers — the last word in comfort, capacity, convenience . . . all the design features of the regular EZ-A-WAY plus cushioned seats in color to harmonize with your gymnasium surrounding, plus OMEGA drive . . . the ultimate in mechanical folding bleacher operation. Simple and easy operation, no complicated installation . . . any school personnel can operate them . . . no adjustments needed for life-time of installation.

MOBILE EZ-A-WAY BLEACHERS (2 TYPES)

Finest mobile bleachers available . . . ROLLOMATIC is equipped with heavy duty large ball bearing wheels. Installations up to 15 rows high operate successfully. "Rollomatic" features oscillating axle dual wheel 4" diameter casters that roll easily over rough floors . . . rubber tread will not damage wood floors. Bleachers raised and lowered without side "drifting" — a feature only in Berlin Chapman "Rollomatic" bleachers. Also available are A-3 type mechanical hand jacks.

EZ-A-WAY FORWARD FOLD GYM SEATS

Provide maximum use of all available floor space — safe . . . modern . . . convenient. EZ-A-WAY Forward Fold Delayed Action Gym Seats cannot overturn — positive floor attachment in every position. EZ-A-WAY Gym Seats are easy to use . . . swinging rear riser board offers plenty of toe space for opening . . . gym seats can be locked in open or closed positions. When closed they form a wall to separate a balcony into a modern room — for gym classes, dances or any other school activities.

BERLIN
SEATING ENGINEERS
BERLIN CHAPMAN CO.
Berlin, Wisconsin U.S.A.

Write for complete details and engineering data for your requirements.

BERLIN CHAPMAN CO.
BERLIN, WISCONSIN

PRODUCT LITERATURE

Unusual, Low Cost Schools

"Stretch Educational Dollars Further with School Buildings Planned With Plywood." Precise descriptions of 7 school construction jobs showing how plywood was effectively used for keeping costs down, utility up. Douglas Fir Plywood Assn., Tacoma 2, Wash.

Circle **OV-301** on reply card, last page

Audible Signals

"Bulletin K." Whether you need to warn against fire or to have a signal that will be audible above machine shop equipment going full blast, you will find one suitable to your special needs in this brochure. Benjamin Div., Thomas Industries, Inc., 207 E. Broadway, Louisville, Ky.

Circle **OV-302** on reply card, last page

Care of Wet Mops, Dust Mops

Engineered Maintenance Data Sheets #5930 and #5931 offer recommendations for the correct use of mops as well as advice on how to store and care for them. Puritan Chemical Co., 916 Ashby St., N.W., Atlanta 18, Ga.

Circle **OV-303** on reply card, last page

Bookbinding Equipment

New 12-page catalog contains extensive collection of bookbinding presses, special tools, guillotine cutters, decorative hand stamps, and handmade papers. Craftools, Inc., 396 Broadway, New York 13, N. Y.

Circle **OV-304** on reply card, last page

Stage Control

Scene shifting is a push button operation with Clancy SceneControl described in new bulletin. Typical installation plan shown. J. R. Clancy, Inc., 1010 W. Belden Ave., Syracuse, N. Y.

Circle **OV-305** on reply card, last page

Laboratory Apparatus

"Announcer of Scientific Equipment." This distributor has a full line of scientific equipment, listed in this comprehensive catalog. Includes prices. Burrell Corp., 2223 Fifth Ave., Pittsburgh 19, Pa.

Circle **OV-306** on reply card, last page

School Equipment

"Get School Off to a Smooth Start!" A sampling of the wide range of school equipment of all types and descriptions which may be obtained through Beckley-Cardy Co., 1900 N. Narragansett Ave., Chicago 39, Ill.

Circle **OV-307** on reply card, last page

Sound Systems, Components

"Industrial Sound Systems by Norelco." The systems described in this brochure are suitable for auditoriums, sports arenas, schools. The components include: Norelco loudspeaker columns, amplifiers, preamplifiers, microphones, intercom systems, delayed sound equipment and inductive paging systems. The North American Phillips Co., 230 Duffy Ave., Hicksville, L. I., N. Y.

Circle **OV-308** on reply card, last page

Theatrical Control Package

"EPD 5006-1." Bulletin provides information on a coordinated system for complete control of stage lighting, rigging and elevating. Vickers Inc., Electric Products Div., 1815 Locust St., St. Louis 3, Mo.

Circle **OV-309** on reply card, last page

8mm Sound in Education

The advent of 8mm sound motion pictures and possible applications of this development in the field of education are outlined in two new pamphlets available from Eastman Kodak Co., "8mm Sound In Education" and "What Can You Do With 100 Lumens." Eastman Kodak Co., Sales Service Div., Rochester 4, N. Y.

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Elementary Science Lab

"The Welch Rol-a-Lab." Folder describes a complete laboratory for teaching elementary school science. Completely integrated unit includes movable demonstration table, large storage cabinet and all apparatus and chemicals. W. M. Welch Scientific Co., 1515 Sedgwick St., Chicago 10, Ill.

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Precision Gym Striping

The Boettcher Rapid Gym Taper, described in a new folder, makes it possible for anyone to do a perfect job of laying out and striping gym floors. The machine lays two parallel strips of masking tape in straight lines or circles; you paint between them; pull off the tape; and have a beautiful professional job. W. A. Boettcher & Co., 4507 N. Clark St., Chicago 40, Ill.

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Gym Floor Manual

Practical help on how to line your basketball court, how to refinish your gym floor, and tools and equipment for proper maintenance. Huntington Laboratories, Huntington, Ind.

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School Record Systems

"Better Systems for Better Schools." Booklet describes and illustrates long-

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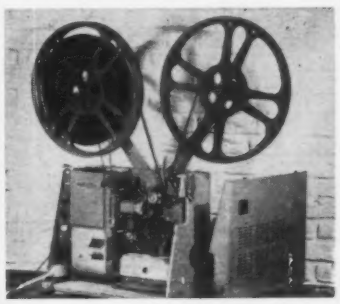
QUIETEST

running 16mm sound projector ever built



KALART VICTOR

FREE—Treasure Chest of Audio-Visual Ideas. Illustrated booklet tells how to use films most effectively in teaching. For your copy, circle OV-174 on service card, last page of this issue.

Victor Animatograph Corp.
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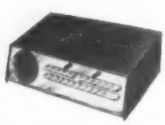

TIX Communophone Intercom

EC School Console

VP20 Transcription Player

BOGEN-PRESTO

Desk OV-1– Paramus, N. J. • A DIVISION OF THE SIEGLER CORPORATION

Literature (continued)

range record systems covering pupils, personnel, property and all kinds of administrative responsibility from kindergarten through college. Filing equipment available also included. Acme Visible Records, Inc., Crozet, Va.

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Matting

"Custom Mats and Matting by Arafe." This line includes utility and decorative mats designed for safety, maximum cleaning action, drainage, shock absorption. George J. Arafe Co., 87 High St., Boston 10, Mass.

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Playground Equipment

Everything the well-equipped school playground could possibly need from nursery merry-go-rounds, swings and slides to basketball backstops and bike racks, all shown in full color. The J. E. Burke Co., New Brunswick, N. J.

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Prefabricated Curtain Wall

"The Story of Project Turnkey." Interesting account of how prefabricated Thinlite curtain wall is used for sun and weather control in the nation's first automated post office. Product has school application. Owens-Illinois, Toledo 1, Ohio.

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Science Center

"Science on the move . . ." shows a new compact science center designed for teacher demonstrations and student experiments. On casters, it is completely portable, with generous storage space. Educators Mfg. Corp., Tacoma, Wash.

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Incinerator Selector

Handy pocket slide rule device for quickly finding the correct incinerator to serve specific needs. Morse Boulger, Inc., 80 Fifth Ave., New York 11, N. Y.

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Dormitory, Lunchroom Furniture

Well-made, distinctively styled cafeteria, office, dormitory furniture for schools illustrated in color in this booklet. Royal Metal Mfg. Co., One Park Ave., New York 16, N. Y.

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Waxless Polish

Zep-O-Tred 20 is a new waxless polish which gives all types of composition floors a brilliant gloss without the danger of slipperiness. The finish is scuff-, soil-, and water-resistant, making maintenance much simpler. Zep Manufacturing Corp., 1310 Seaboard Industrial Blvd., Atlanta, Ga.

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The business reply card covers products and services referred to in both advertisements and editorial reviews in this issue. The key (OV number) is found above the advertisement or following the editorial listing in the body of the magazine.

If further information concerning any of these products is desired, it will be sent without charge or obligation. Simply circle the identifying numbers on the back of the business reply card and mail it to us.

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"Our cost for fuel this first year was nearly ten per cent below the amount budgeted. . ."

. . . says John A. Whitehead
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Eliminating radiators and convectors provides additional valuable space not available with conventional systems - also lowers initial accommodation costs

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No other heating method provides the same uniformity of temperature with essentially no differential from floor to ceiling

Maximum heat transfer efficiency is attained with substantial fuel economy with maintenance costs considerably lower

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UNION FREE SCHOOL DISTRICT NO. 2
EASTCHESTER, NEW YORK

JOHN A. WHITEHEAD
SUPERINTENDENT OF SCHOOLS
69 CRAWFORD STREET
EASTCHESTER, NEW YORK

September 20, 1960

Mr. Ivan Park
Jacobson and Company, Inc.
Burgess-Manning Division
227 East 44th Street
New York 17, New York

Dear Mr. Park:

We have finished one complete school year with the Burgess-Manning Radiant Acoustical Ceiling method of heating. You will be interested to know that this experience has been most satisfactory.

When inspecting this heating system with you two years ago, you will recall that I was impressed with the evenness of heat and lack of draftiness. There were functional advantages too, in that no floor space had to be allocated to heating equipment and teachers had complete freedom of room arrangement without regard to problems of heat circulation.

These advantages have been realized fully and we have also had the pleasure of eliminating unsanitary pillows, blankets, or other materials when children sit on floors since the floors are warm and comfortable at all times. Our cost for fuel this first year was nearly ten per cent below the amount budgeted which leads us to believe that this will be an economical system to operate.

Perhaps from an administrative point of view, the best feature of all was that the system worked from the day we started with practically no adjustments.

Hearty congratulations!!!!

Very truly yours,

John A. Whitehead
Superintendent of Schools

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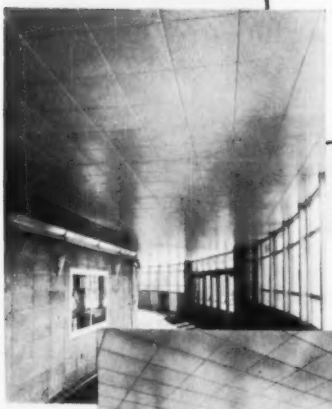

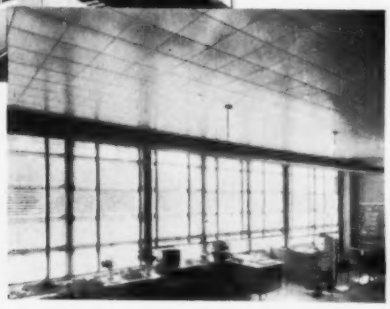

Mr. Whitehead's letter confirms the superiority of the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling . . . which offers schools

- maximum pupil comfort
- acoustical efficiency
- attractive appearance
- structural simplicity
- operating economy
- maintenance savings

From the standpoint of comfort and efficiency in schools . . . large and small . . . *there is no comparison* with the Burgess-Manning Radiant Heating, Cooling and Acoustic Ceiling!

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3 Heating Cooling Acoustic

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